Dot Matrix Dialect

for cello, piano, percussion and electronic sound

◆

2016

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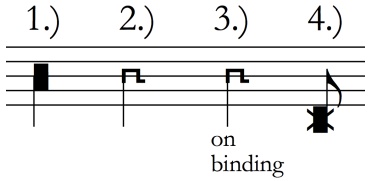
CELLO ABBREVIATED TECHNIQUES

SP – *sul ponticello*
MSP – *molto sul ponticello*
CL Bat – *col legno battuto*

ST – *sul tasto*
MST – *molto sul tasto*

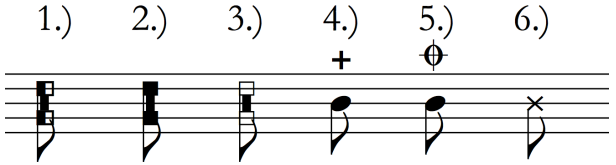
Each of these techniques applies **only to the event over which they are written**, unless extended by a horizontal bracket or additional text specifies how long they last.

CELLO NOTEHEADS



1.) Mute strings with left hand resulting in an unpitched sound. Multiple fingers of the left hand should be in contact with each string at different locations, ensuring that the strings are deadened and will not produce pitches. Harmonic pressure should be used to avoid generating a fundamental pitch. Written register (approx. pitch) indicates L.H. position - higher notes correspond to higher positions on the fingerboard.
2.) Scratch tone – pitchless, high pressure and a slow bow speed. Use left-hand muting to avoid open string resonances.
3.) Scratch tone behind the bridge on the string binding. Use left-hand muting to avoid open string resonances.
4.) Forcefully slap the strings on the fingerboard with the left hand. Always written at this position on the staff.

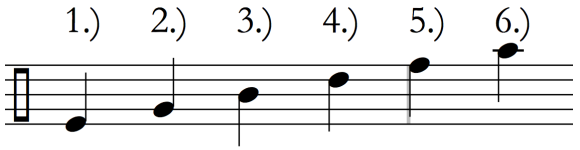
PIANO NOTEHEADS



1.) Fully chromatic clusters/glissandi.
2.) Clusters/glissandi with only black notes.
3.) Clusters/glissandi with only white notes.
4.) Muted. As little pitch as possible unless otherwise noted.
5.) Not played on the keyboard; stop the resonance of the previous note with muting, making an articulate sound whilst hitting the strings.
6.) Plucked with fingernail.

PERCUSSION INSTRUMENTS

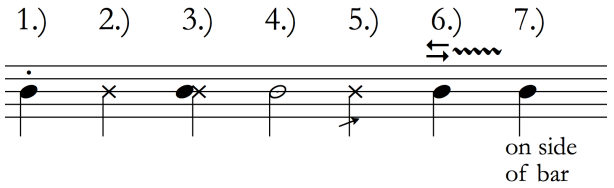
Vibraphone, glockenspiel as well as the following unpitched set of instruments:



1.) Large plastic bucket. ~20 liters made of thick, hard material. Inverted and on a table with cloth/foam.
2.) Small plastic bucket. ~4 liters made of thick, hard material. Inverted and on a table with cloth/foam.

3.) Shekere, played non-traditionally – a 'w' above the staff indicates to play with a mallet on the part without beads. A 'b' indicates to strike the beaded surface with a mallet. An 'h' indicates a slap the beads with a hand. 'h' should be less articulate and pointed than 'b'.
4.) Wooden Guiro. By default, hit like a woodblock, not scraped unless notation 5 (below) is given.
5.) Large tin can or small metal waste bin. ~2-4 liters. Inverted and on a table with cloth/foam.
6.) Whiskey bottle. On a table dampened with cloth/foam. Emptied responsibly.

PERCUSSION NOTEHEADS

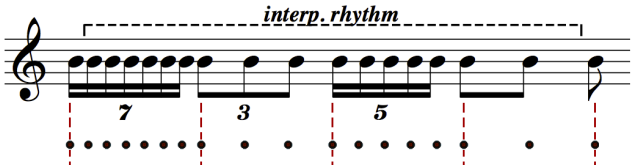


1.) Staccato performed as a deadstroke.
2.) For buckets and tin can, play on the rim with the shaft.
3.) Rimshot.
4.) Hit towards the edge of the membrane. Only applies to the buckets which, otherwise, are to be hit in the centre.
5.) An arrow across the note stem indicates a scraping motion (guiro only). Always use the shaft of the mallet, thus this notation will always use an x-notehead.
6.) A tremolo produced with the stick in constant contact with the instrument – after the initial attack, the stick should not leave the surface. The tremolo is created by rapidly moving the stick back-and-forth, "scribbling" across a small area. Accents and dynamics are created by expanding/contracting the area of the motion. Play frantically, as fast as possible.
7.) 'On side of bar', vibraphone only: strike the bar on the side of the top edge with the mallet.

SHAFT POSITION indicates where to play along the vertical length of the shaft. Locations closer to the head (top of the staff) should have a higher, brighter timbre which locations towards the end of the stick (bottom of staff) should be duller.

DYNAMICS IN QUOTATIONS MARKS are given when the resulting sound will be softer than the dynamic written due to an unusual performance technique. In these cases the written dynamic specifies the relative intensity of the performer's action.

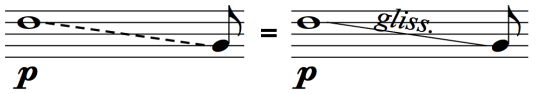
INTERPOLATE RHYTHM modifies the performance of written rhythms in a given passage such that the changing speed of attacks is smoothed. An example is shown to the left. Underneath the symbolic notation are two rows of dots corresponding to individual note attacks. The first line of dots shows the normal performed rhythm. The second row of dots shows the desired result of the "interpolate rhythm" instruction. Such modifications essentially ensure that, rather than an abrupt change in speed, the rate of successive notes is continually modified to achieve a fluid, continuous rhythm.



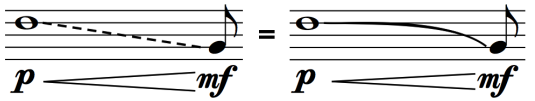
GLISSANDI are always notated such that quarter note stems are shown to indicate the location of each beat in each bar. These stems ***do not*** indicate bow changes or accent patterns, but are present only to elucidate rhythm.

DASHED GLISSANDI indicate that the rate of pitch change is coupled to the amplitude of the note. Thus, louder dynamics result in a faster glissando speed while softer dynamics indicate a slower glissando. As dynamics change over the course of a glissando, the speed of glissando should change in tandem. Consider the following examples that illustrate this coupling:

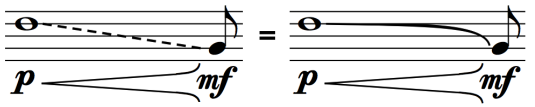
1. A static amplitude yields an even glissando, equivalent to an ordinary glissando.



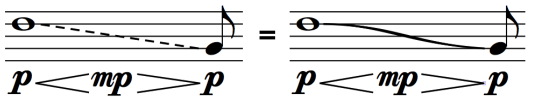
2. However, a change in dynamic affects the slope of the glissando. In this case, the dynamic increase from p to mf creates a steeper pitch change towards the end of the note.



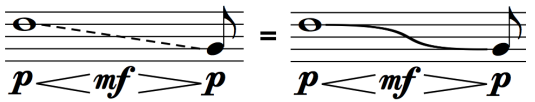
3. The slope of the change in dynamic affects the slope of the glissando. Here, the exponential hairpin creates a more sudden pitch change when compared to 2.



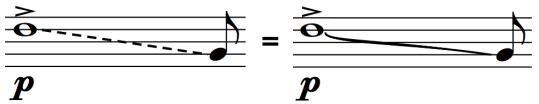
4. The intensity of dynamic change also affects the intensity of the glissando speed. A change from p – mp only creates a slight change in glissando slope...



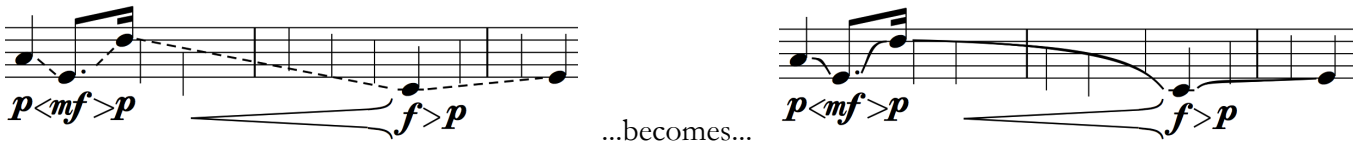
5. …while a change from p to mf yields a more dramatic slope in pitch change when compared to **4**.



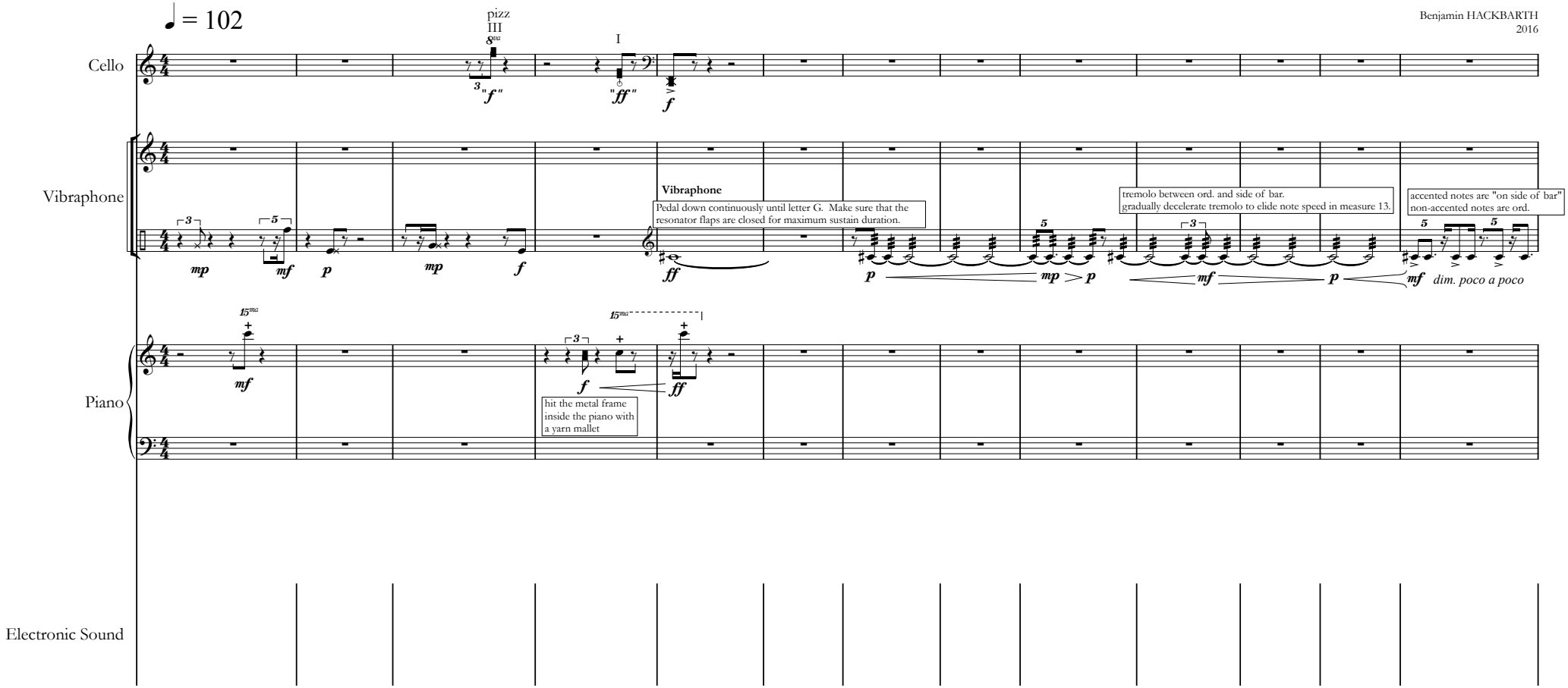
6. Any change in amplitude, however notated, affects glissando speed. Shown here, an accent.

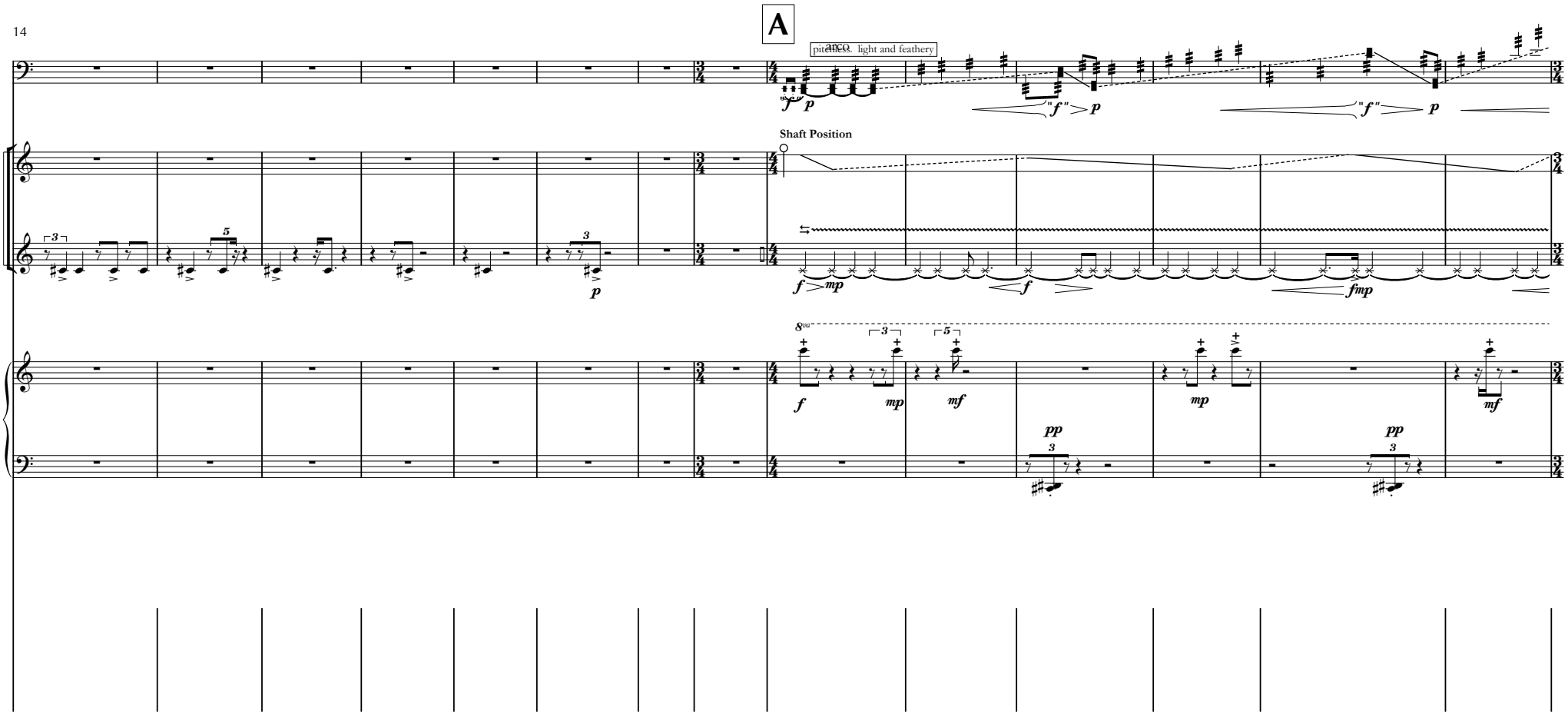


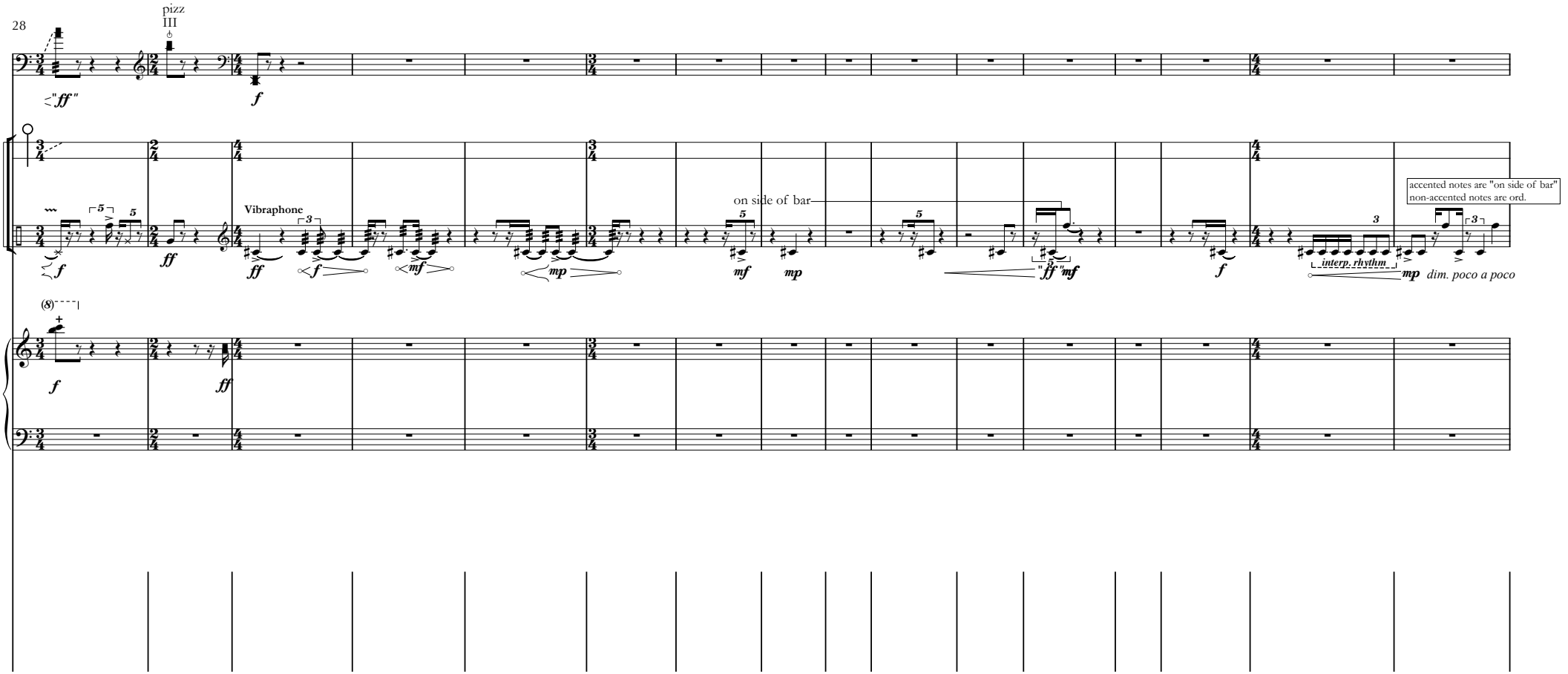
Consider a more complete passage utilizing this notation:

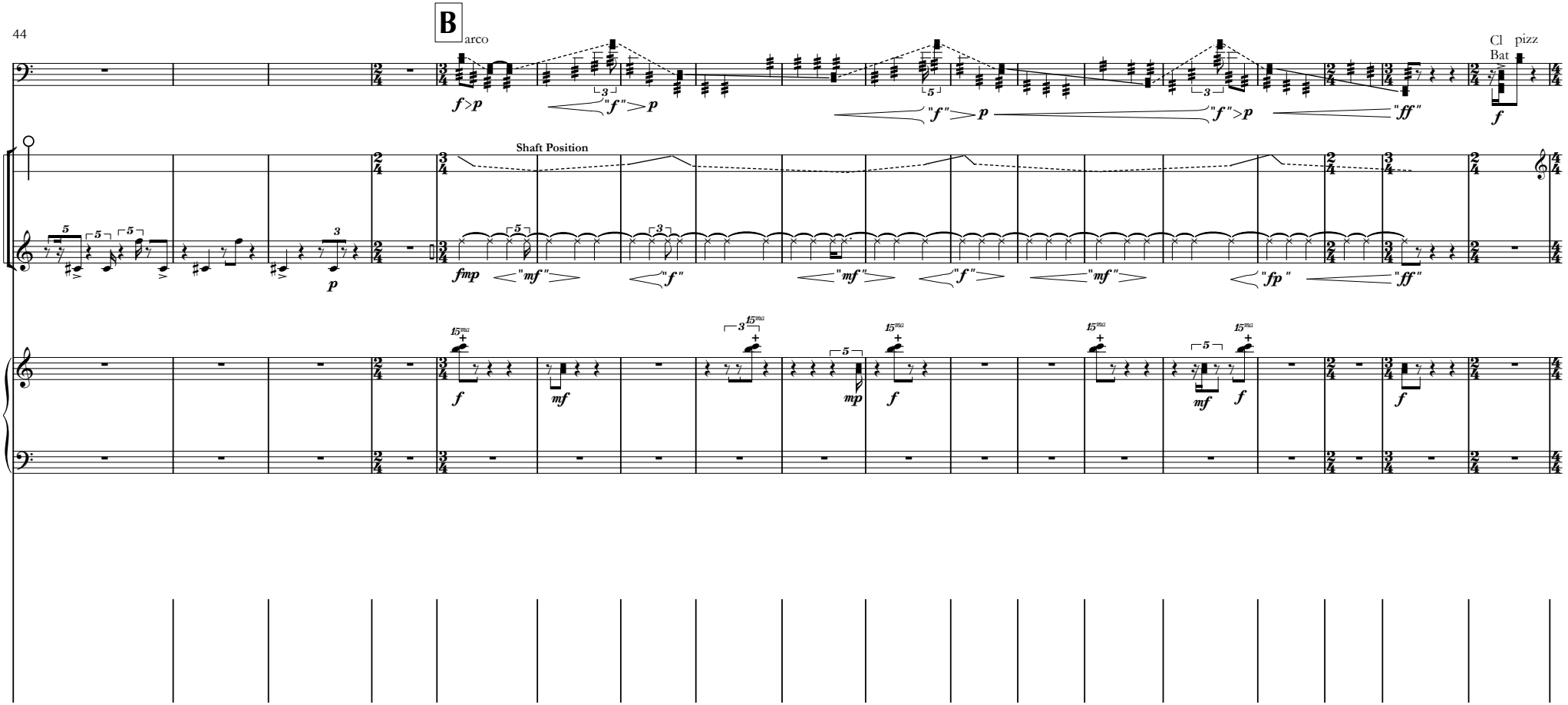


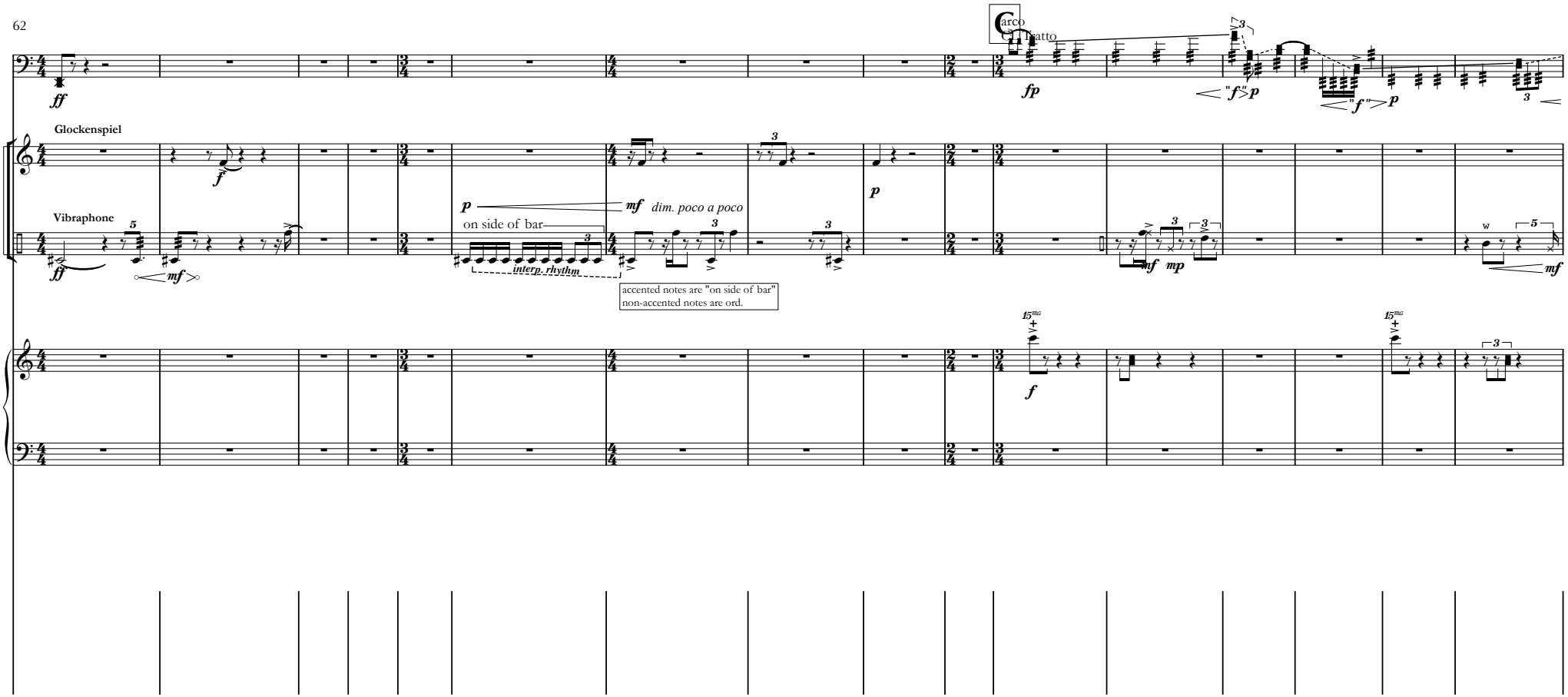
Dot Matrix Dialect

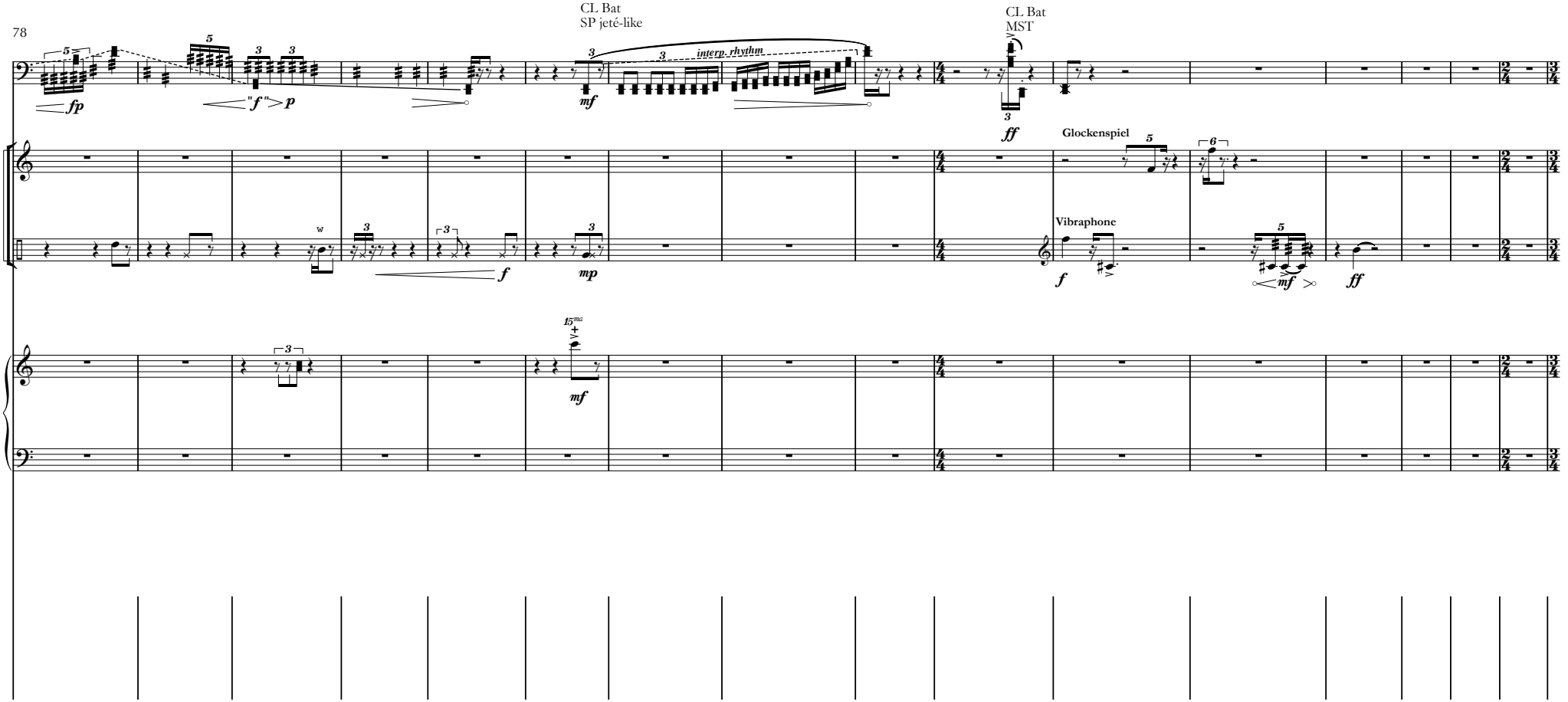


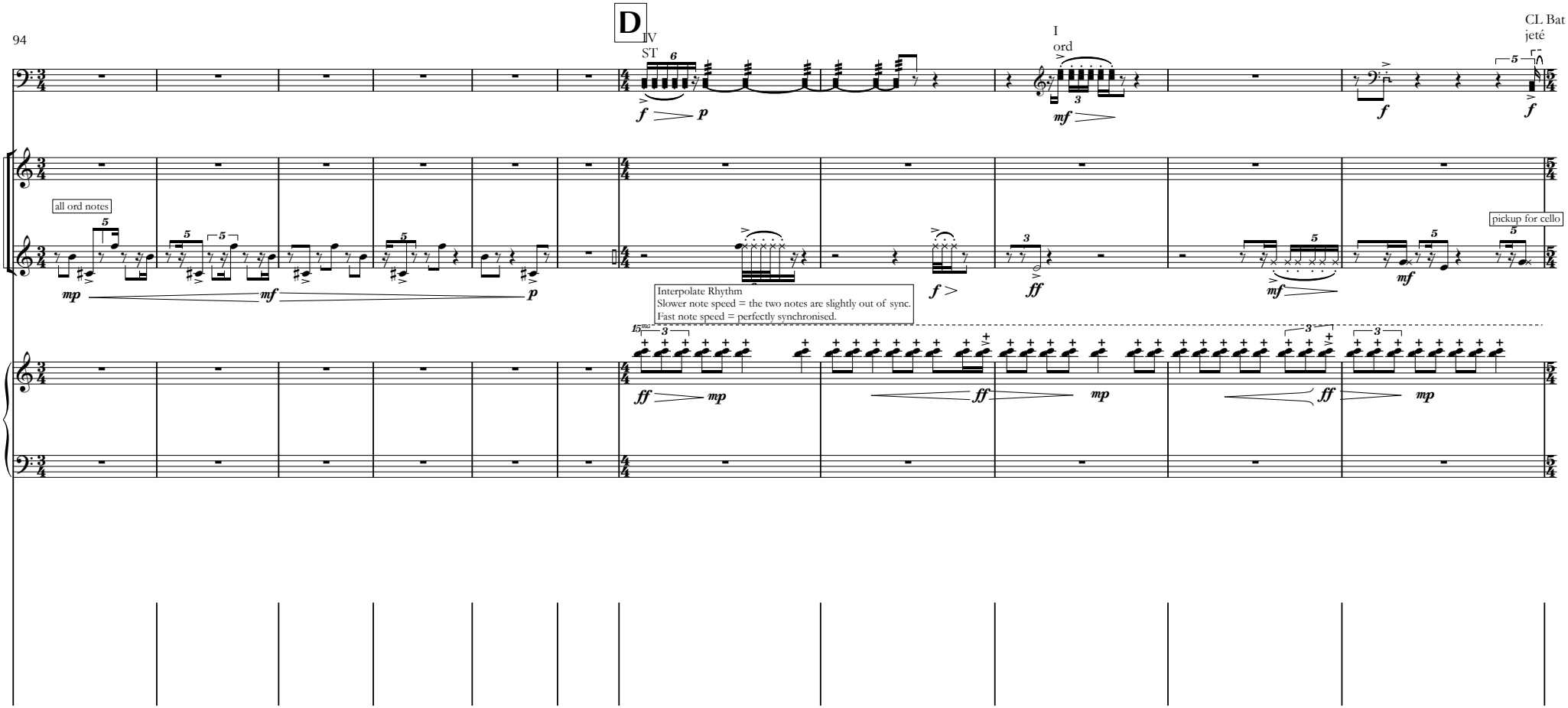

A
arco
pitchless light and feathery
Shaft Position

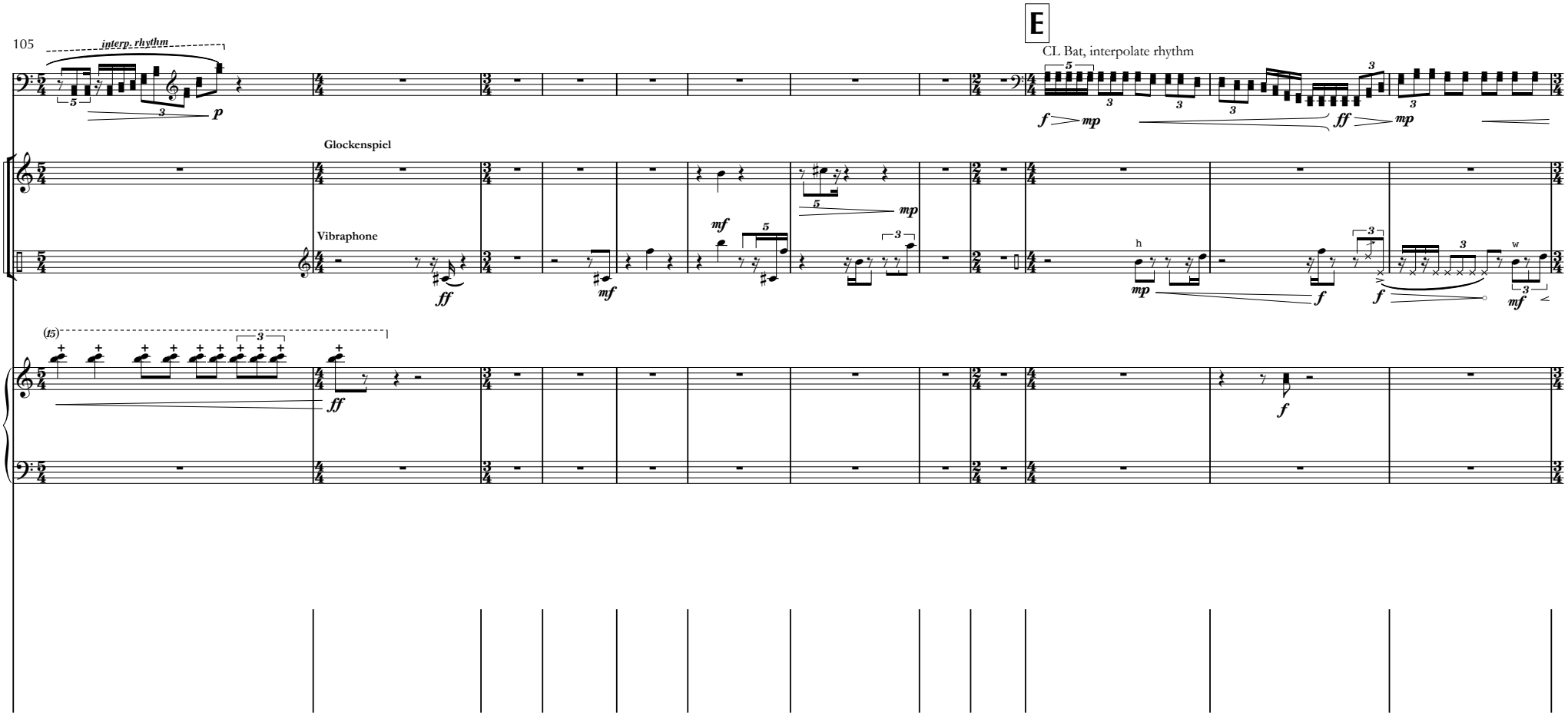

28
pizz
III
"ff"
f
Vibraphone
on side of bar
accented notes are "on side of bar"
non-accented notes are ord.
interp. rhythm
dim. poco a poco

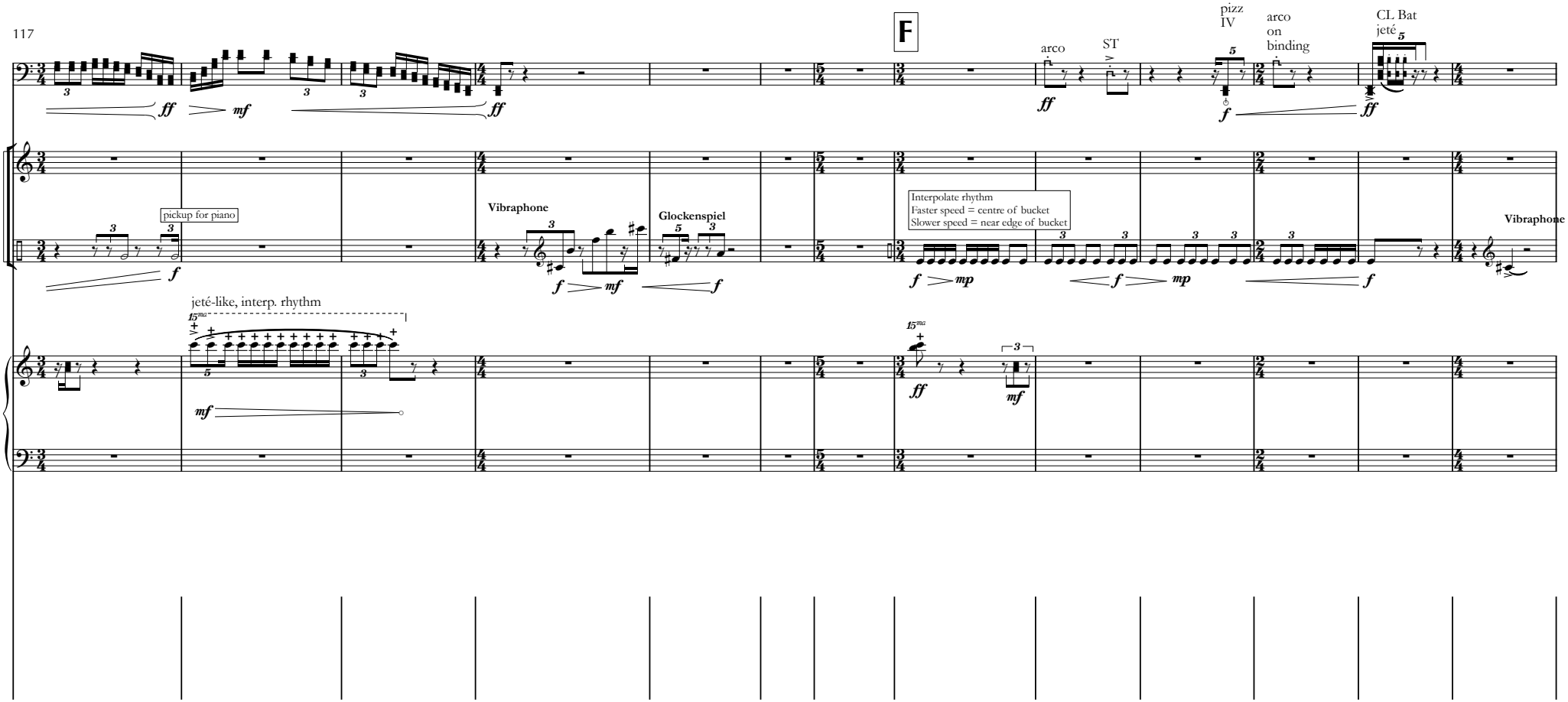

44
B
arco
Cl pizz
Bat
Shaft Position

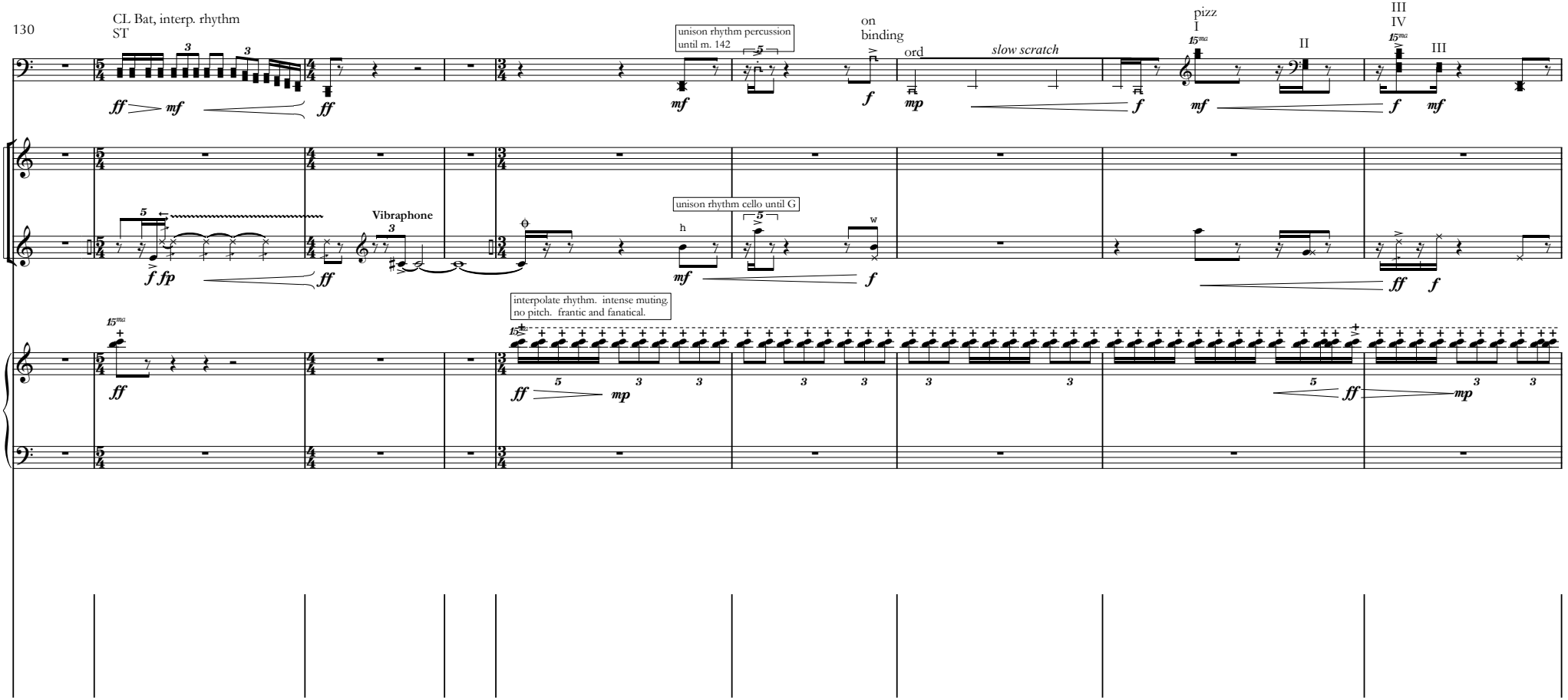

C
arco
Tratto
Glockenspiel
Vibraphone
on side of bar
interp. rhythm
accented notes are "on side of bar"
non-accented notes are ord.
dim. poco a poco

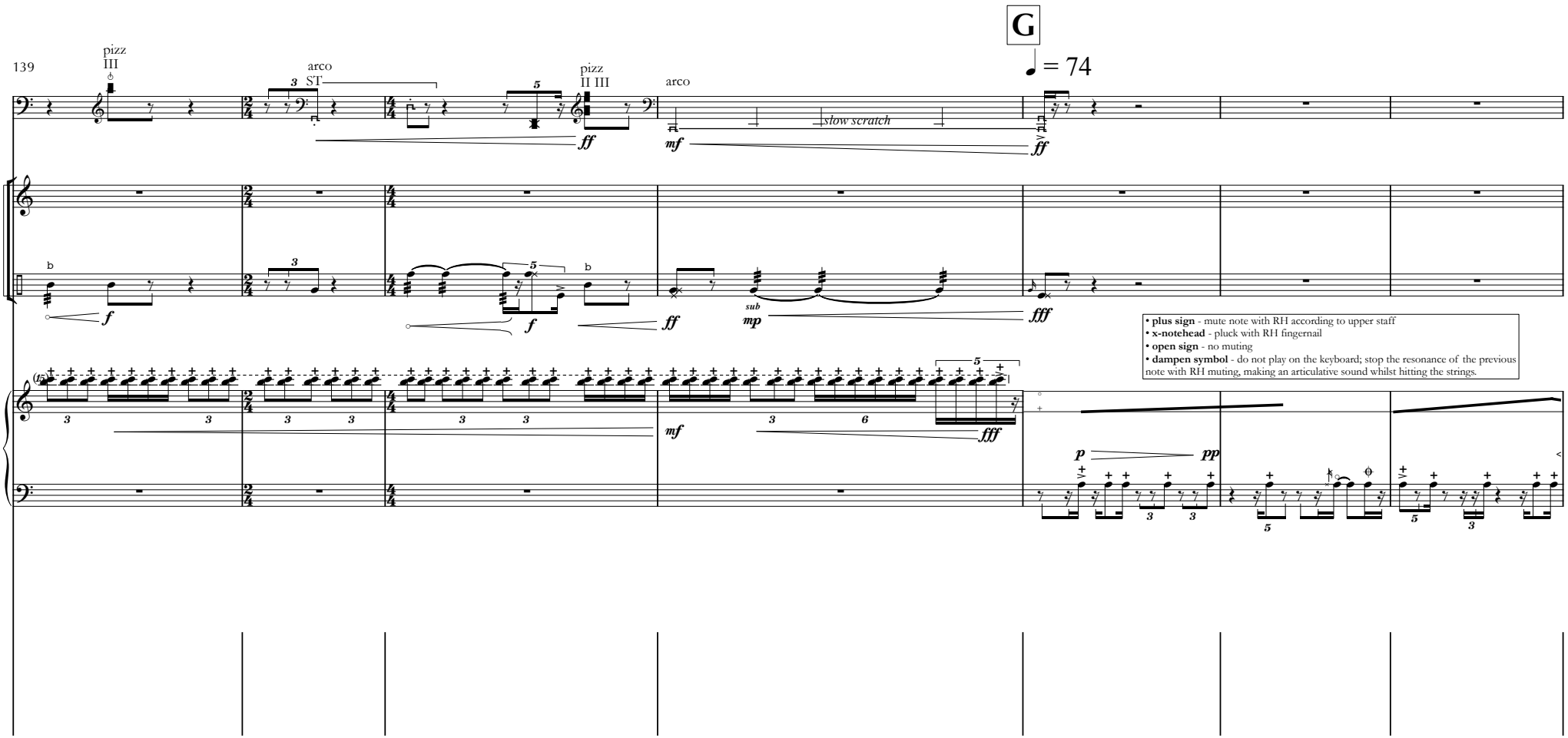

78
CL Bat
SP jeté-like
interp. rhythm
CL Bat
MST
Glockenspiel
Vibraphone

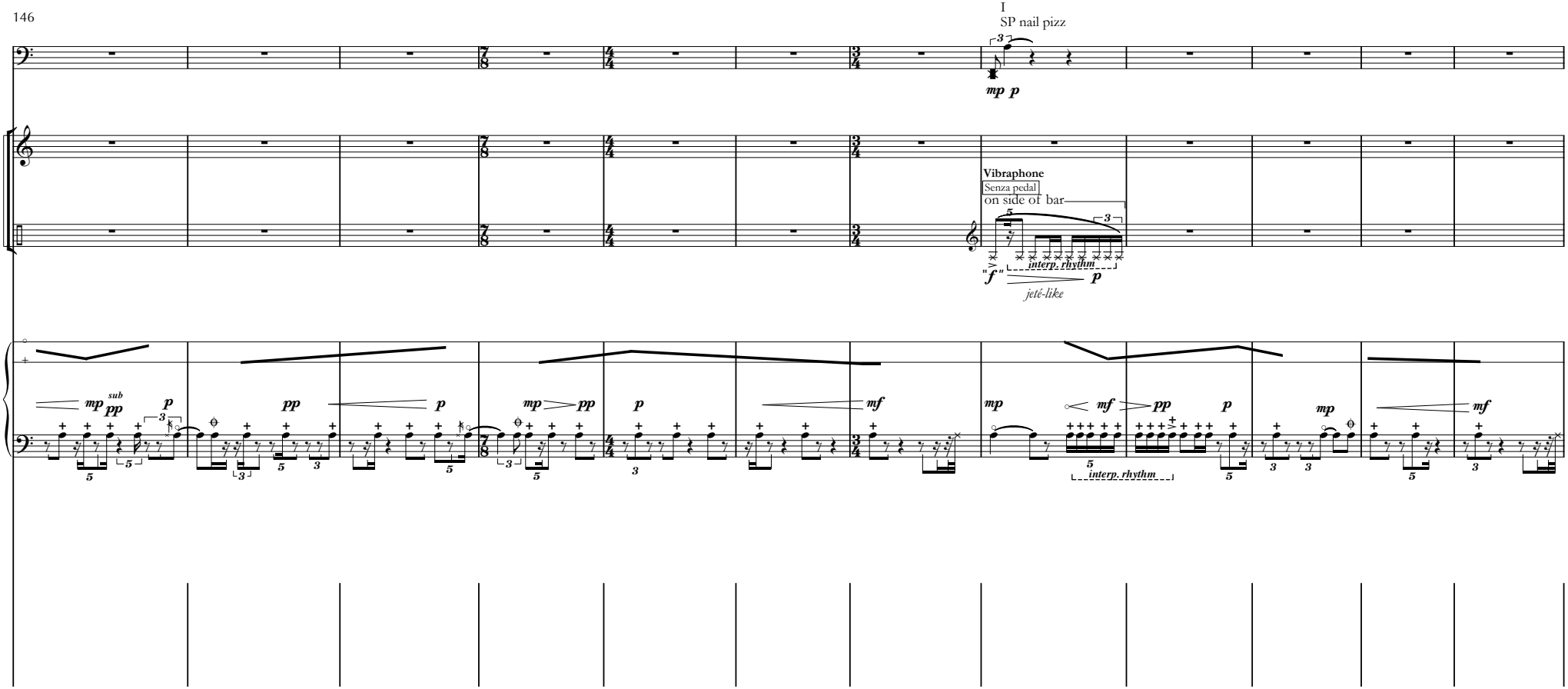

94
D
IV
ST
I
ord
CL. Bat
jeté
all ord notes
pickup for cello
Interpolate Rhythm
Slower note speed = the two notes are slightly out of sync.
Fast note speed = perfectly synchronised.

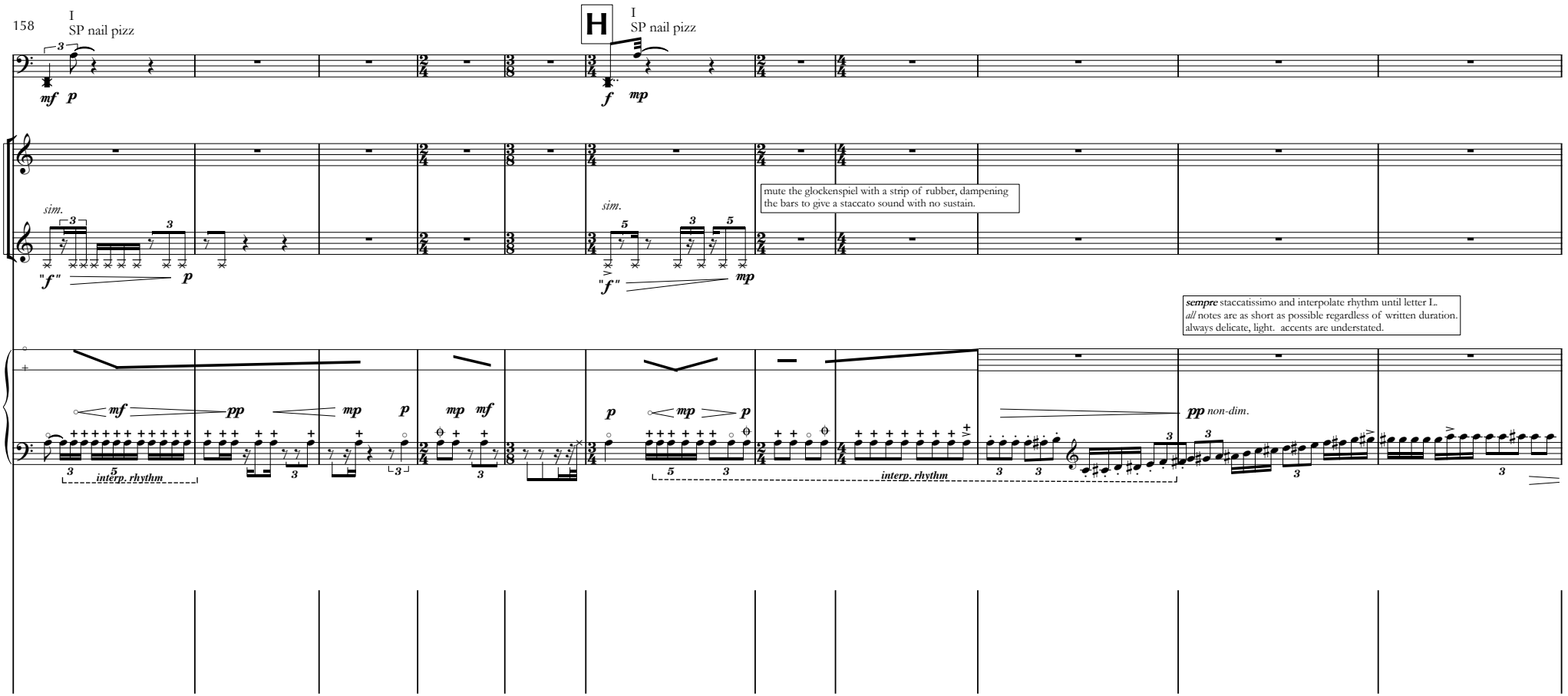

105
interp. rhythm
E
CL Bat, interpolate rhythm
Glockenspiel
Vibraphone

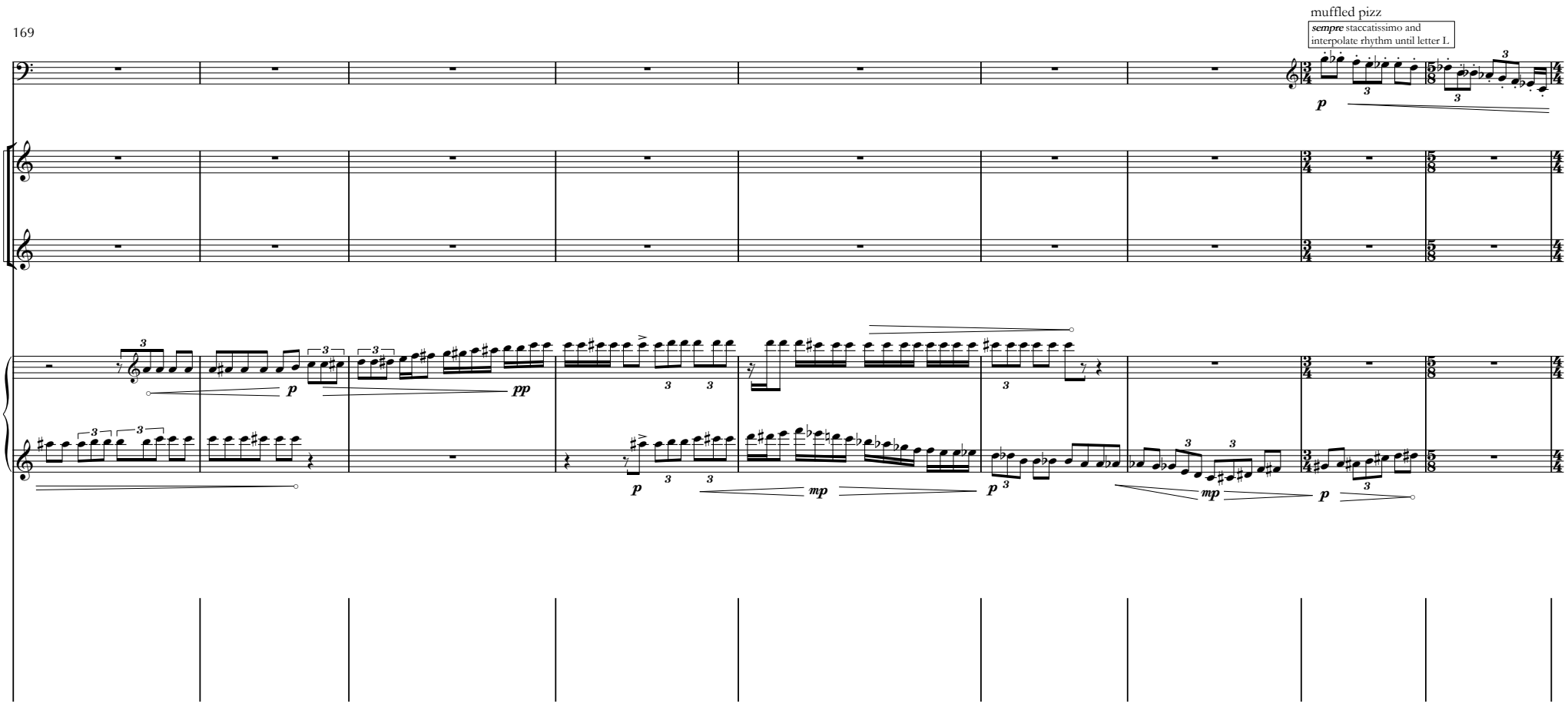

117
F
arco
ST
pizz
IV
arco
on
binding
CL Bat
jeté
pickup for piano
Vibraphone
Glockenspiel
Interpolate rhythm
Faster speed = centre of bucket
Slower speed = near edge of bucket
Vibraphone
jeté-like, interp. rhythm

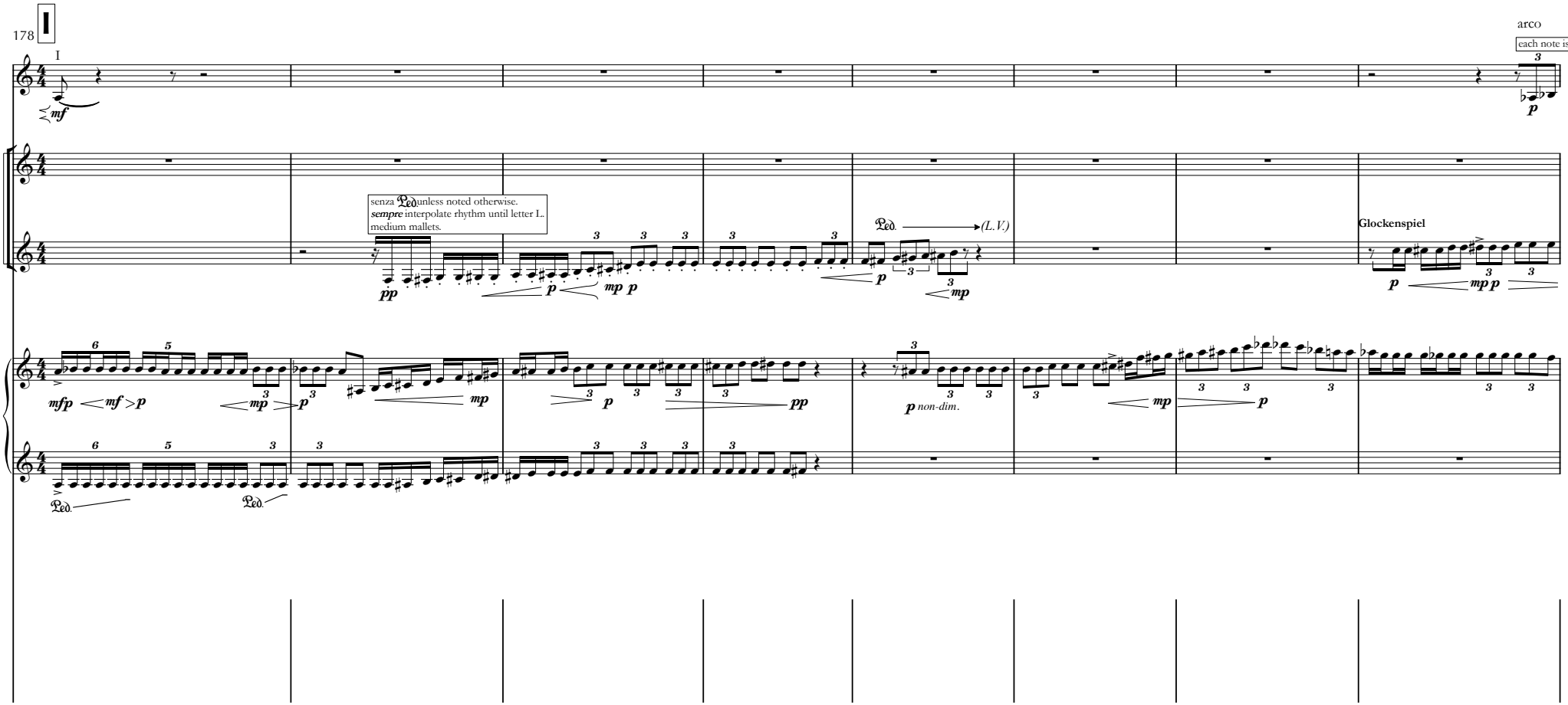

130
CL. Bat, interp. rhythm
ST
unison rhythm percussion
until m. 142
on
binding
ord
slow scratch
pizz
I
II
III
IV
Vibraphone
unison rhythm cello until G
interpolate rhythm. intense muting.
no pitch. frantic and fanatical.

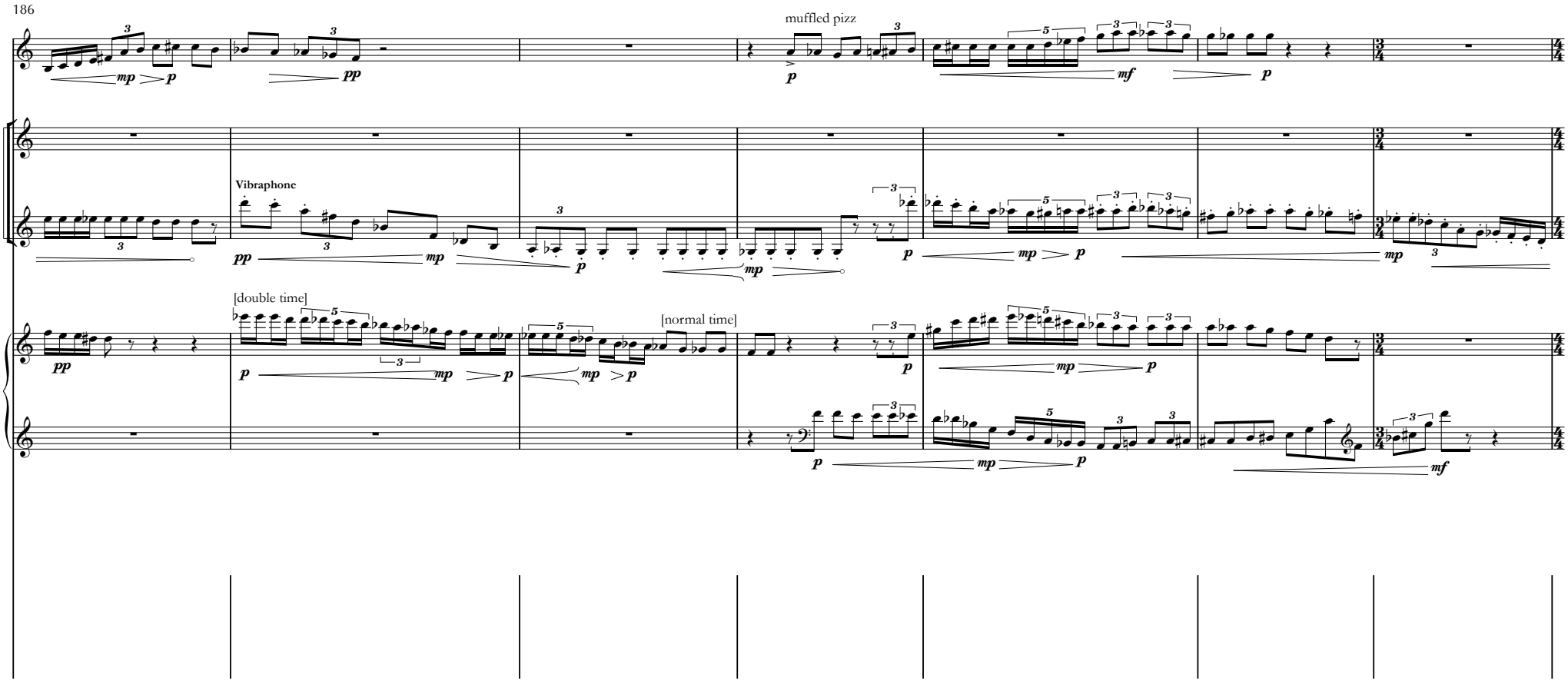

139
pizz
III
arco
ST
pizz
II III
arco
slow scratch
G
♩ = 74
sub
• plus sign - mute note with RH according to upper staff
• x-notehead - pluck with RH fingernail
• open sign - no muting
• dampen symbol - do not play on the keyboard; stop the resonance of the previous note with RH muting, making an articulative sound whilst hitting the strings.

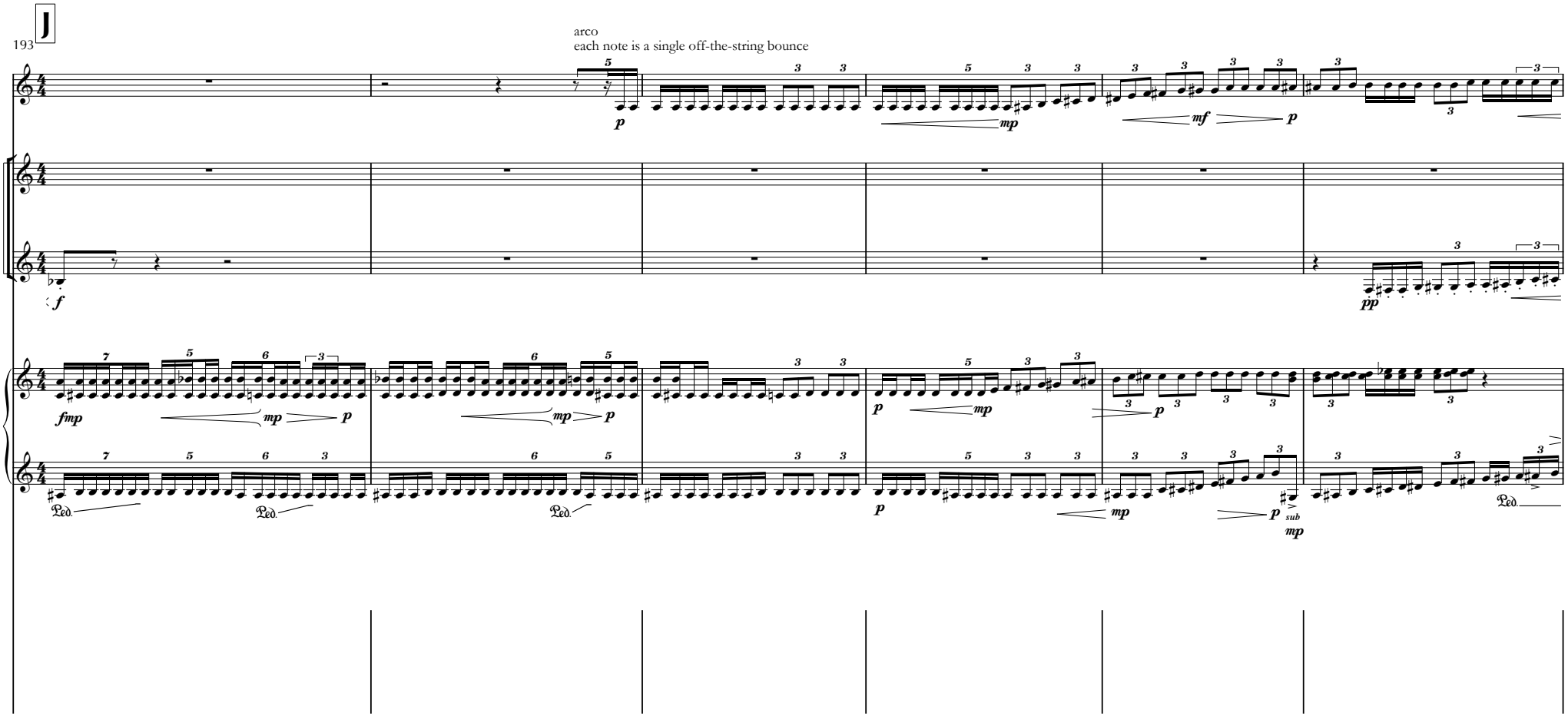

146
I
SP nail pizz
mp p
Vibraphone
Senza pedal
on side of bar
"f"
interp. rhythm
p
jeté-like
mp sub pp
p
pp
p
mp pp
p
mf
mp
mf pp
p
mp
mf
interp. rhythm

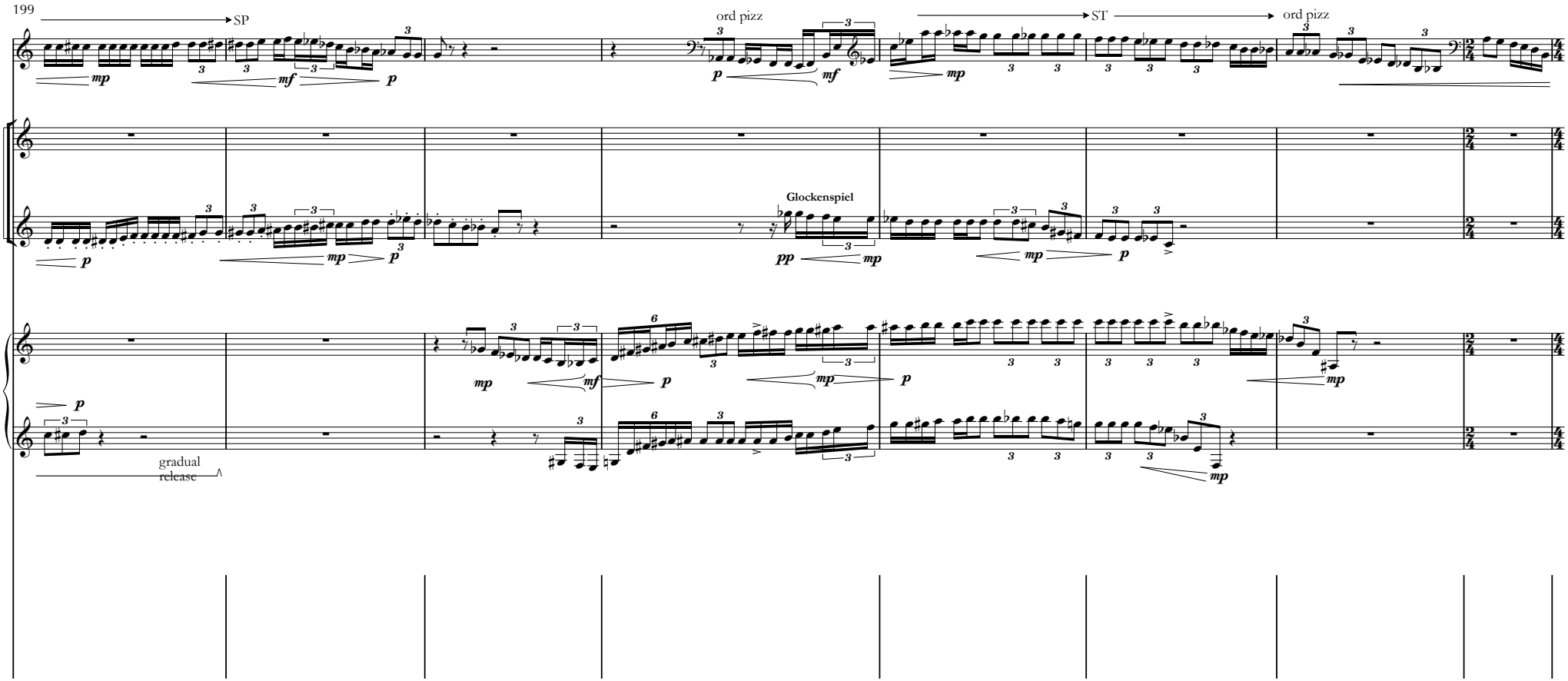

158
I
SP nail pizz
H
I
SP nail pizz
mf p
f mp
sim.
"f" p
sim.
"f" mp
mute the glockenspiel with a strip of rubber, dampening the bars to give a staccato sound with no sustain.
sempre staccatissimo and interpolate rhythm until letter L.
all notes are as short as possible regardless of written duration.
always delicate, light. accents are understated.
mf pp mp p mp mf
p mp p
pp non-dim.
interp. rhythm
interp. rhythm

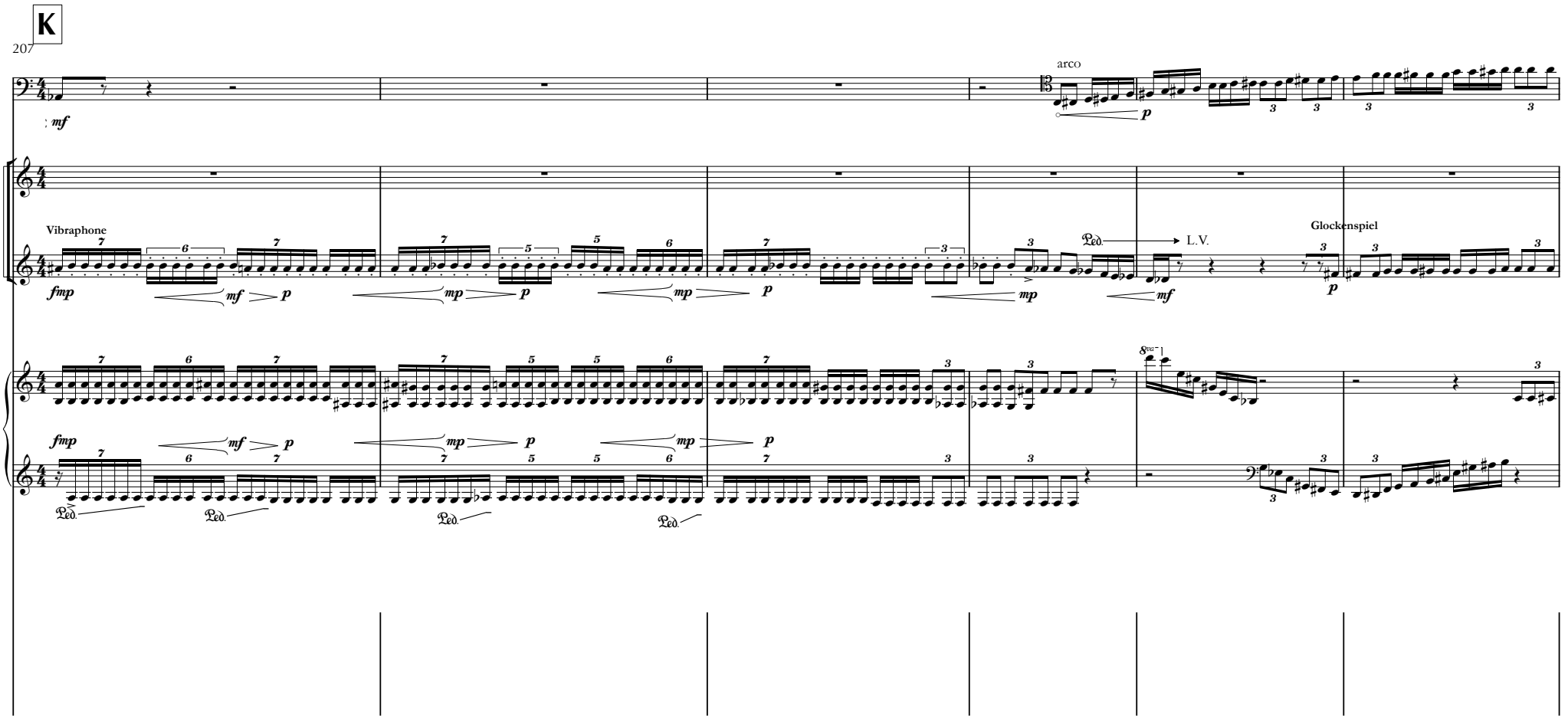

169
muffled pizz
sempre staccatissimo and
interpolate rhythm until letter L
p
pp
mp
mp
p

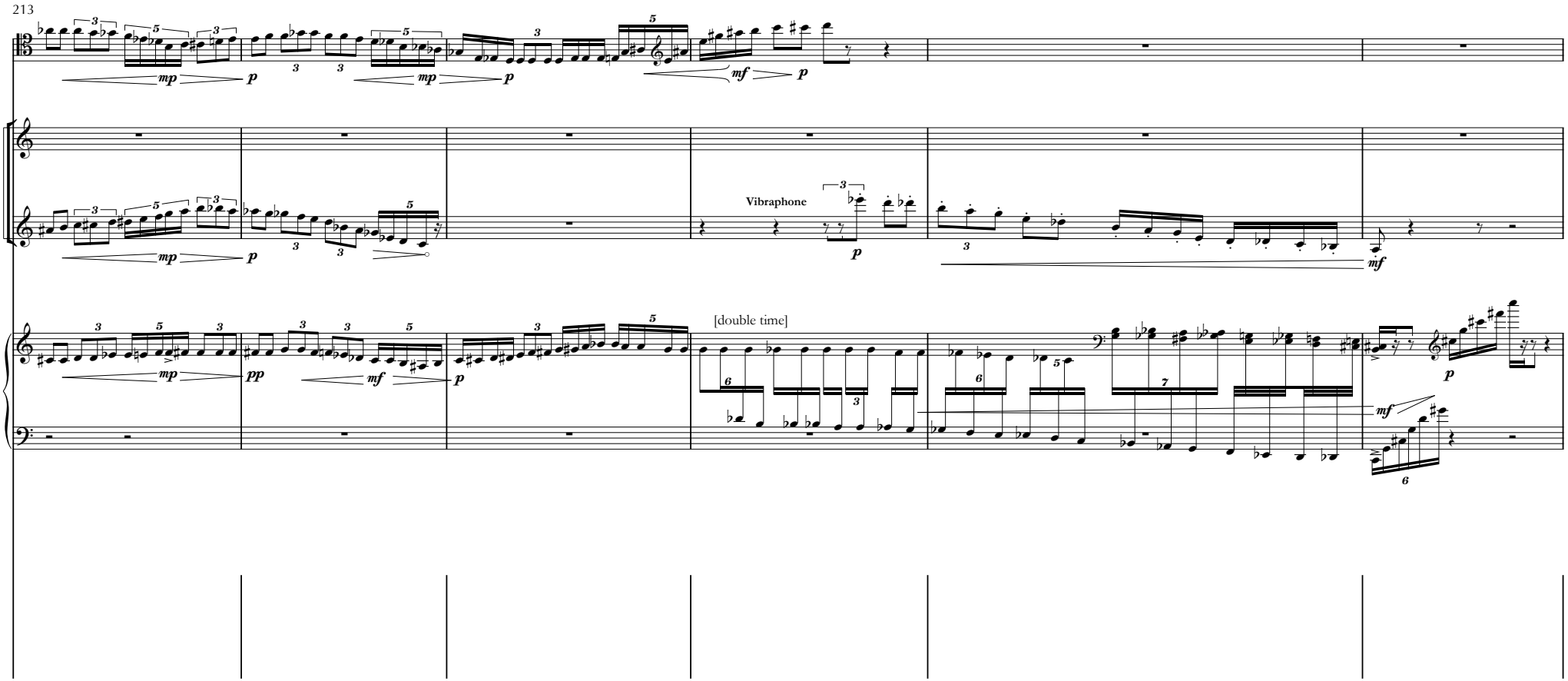

178
I
I
arco
each note is a single off-
mf
p
senza Ped. unless noted otherwise.
sempre interpolate rhythm until letter L.
medium mallets.
pp
p
mp p
Ped.
(L.V.)
p
mp
Glockenspiel
p
mp p
mfp
mf >p
mp
p
mp
p
pp
p non-dim.
mp
p
Ped.
Ped.

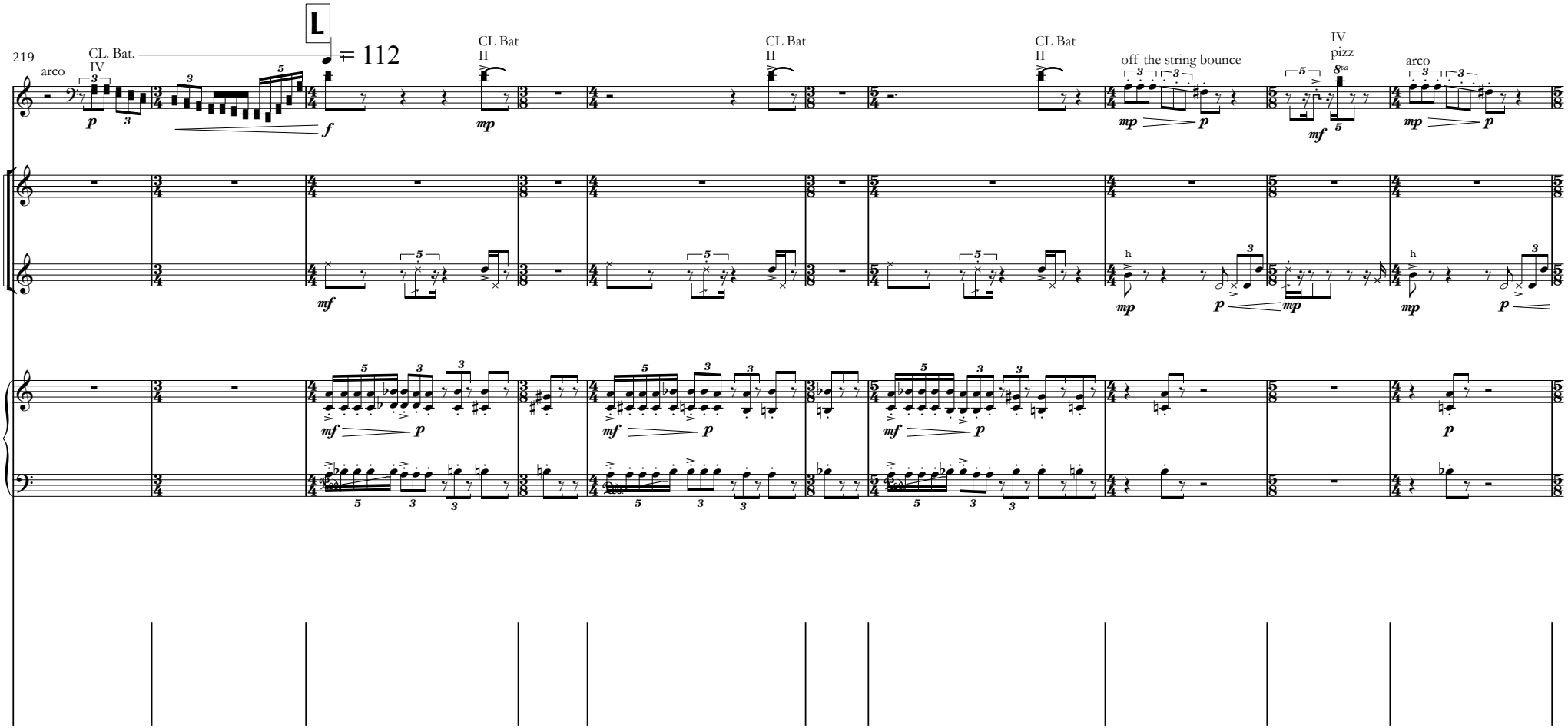

186
muffled pizz
Vibraphone
[double time]
[normal time]

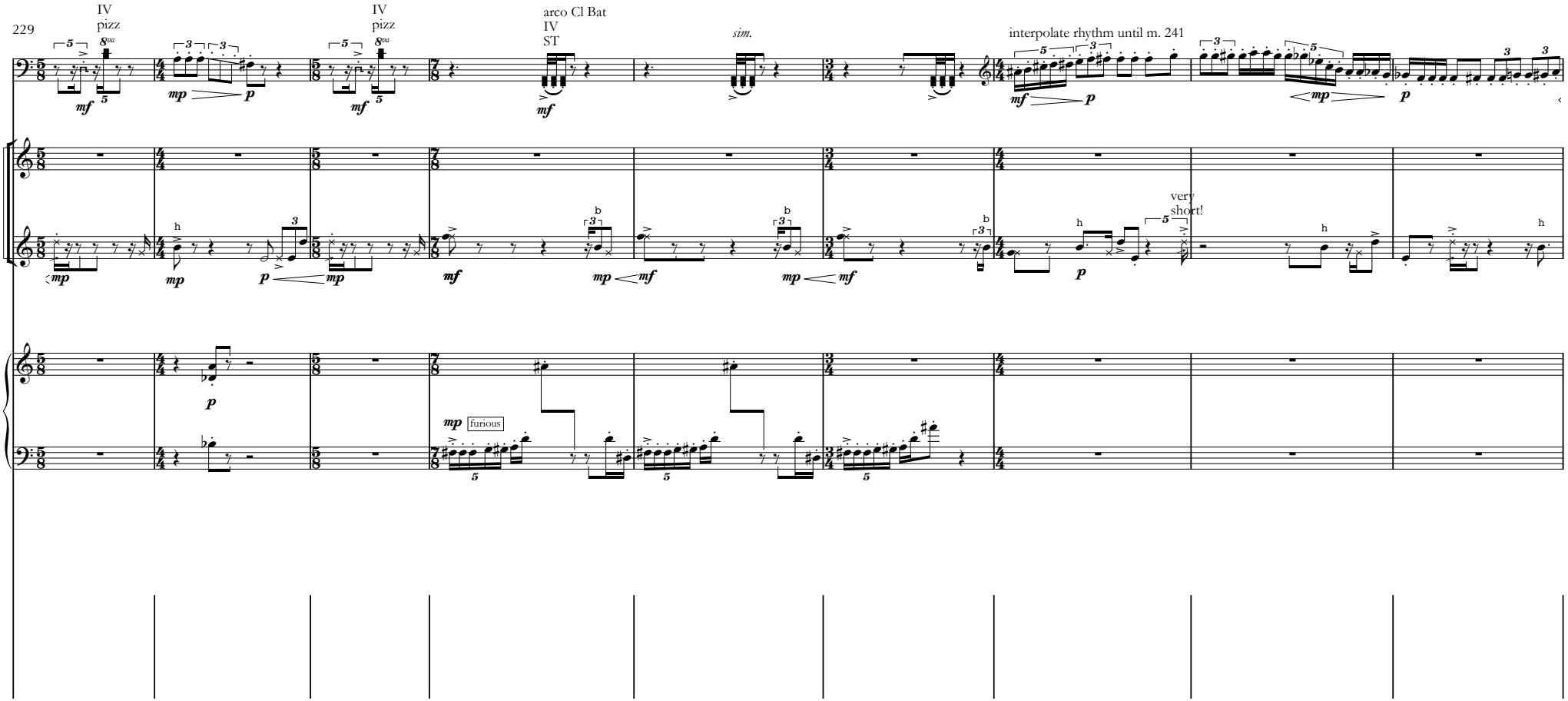

J
193
arco
each note is a single off-the-string bounce
p
mp
mf
p
f
pp
fmp
mp
p
mp
p
p
mp
p
mp
p
sub
mp
Ped.
Ped.
Ped.
Ped.

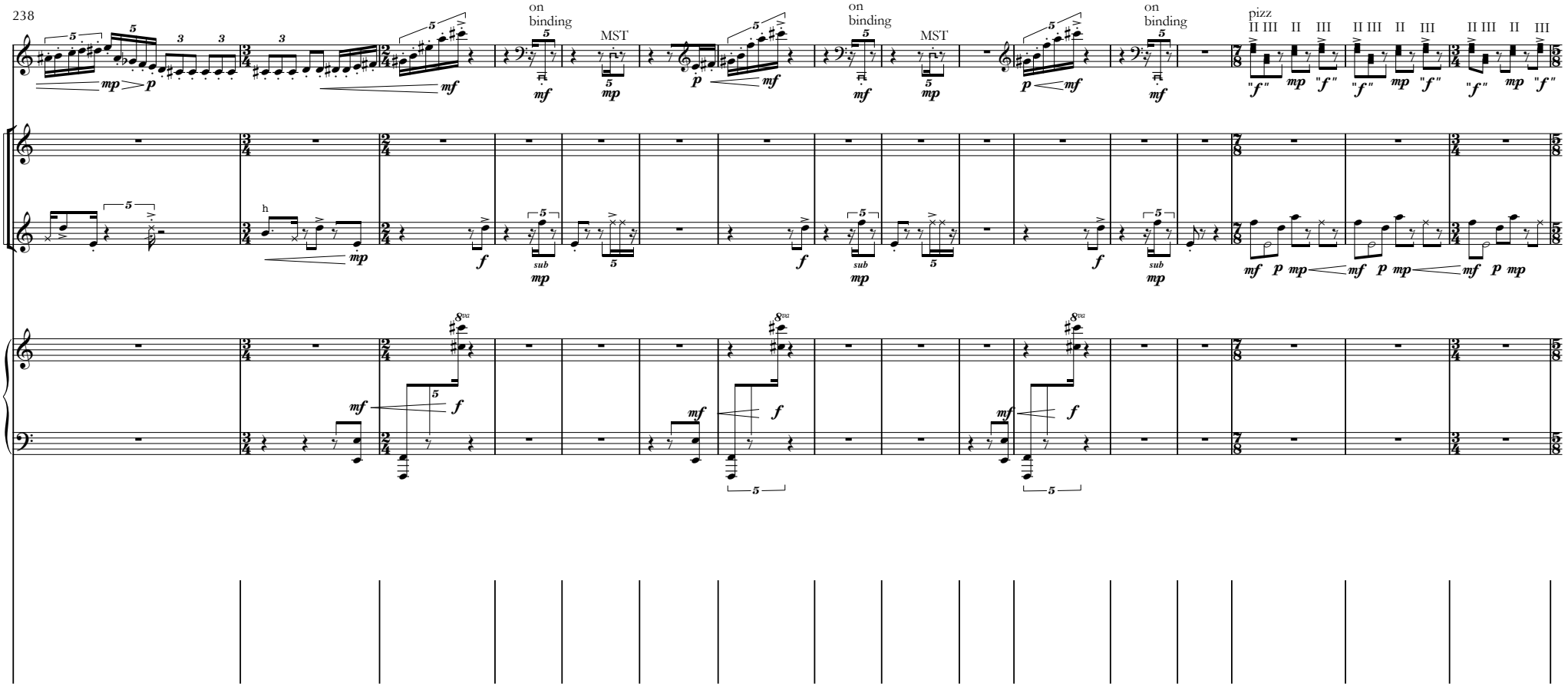

199
SP
ord pizz
ST
ord pizz
Glockenspiel
gradual release

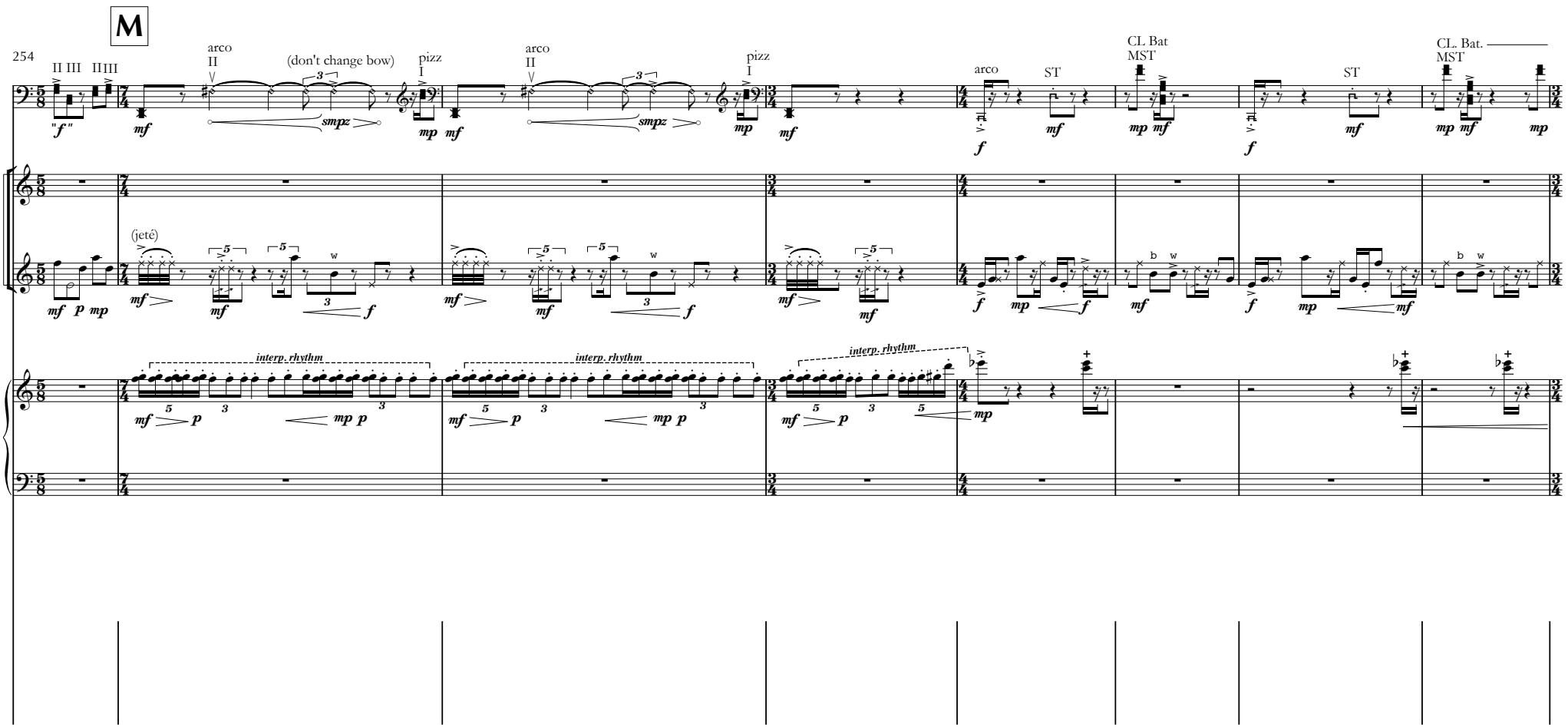

K
207
arco
mf
p
Vibraphone
fmp
mf
p
mp
p
mp
p
mp
Ped.
L.V.
mf
Glockenspiel
p
8va

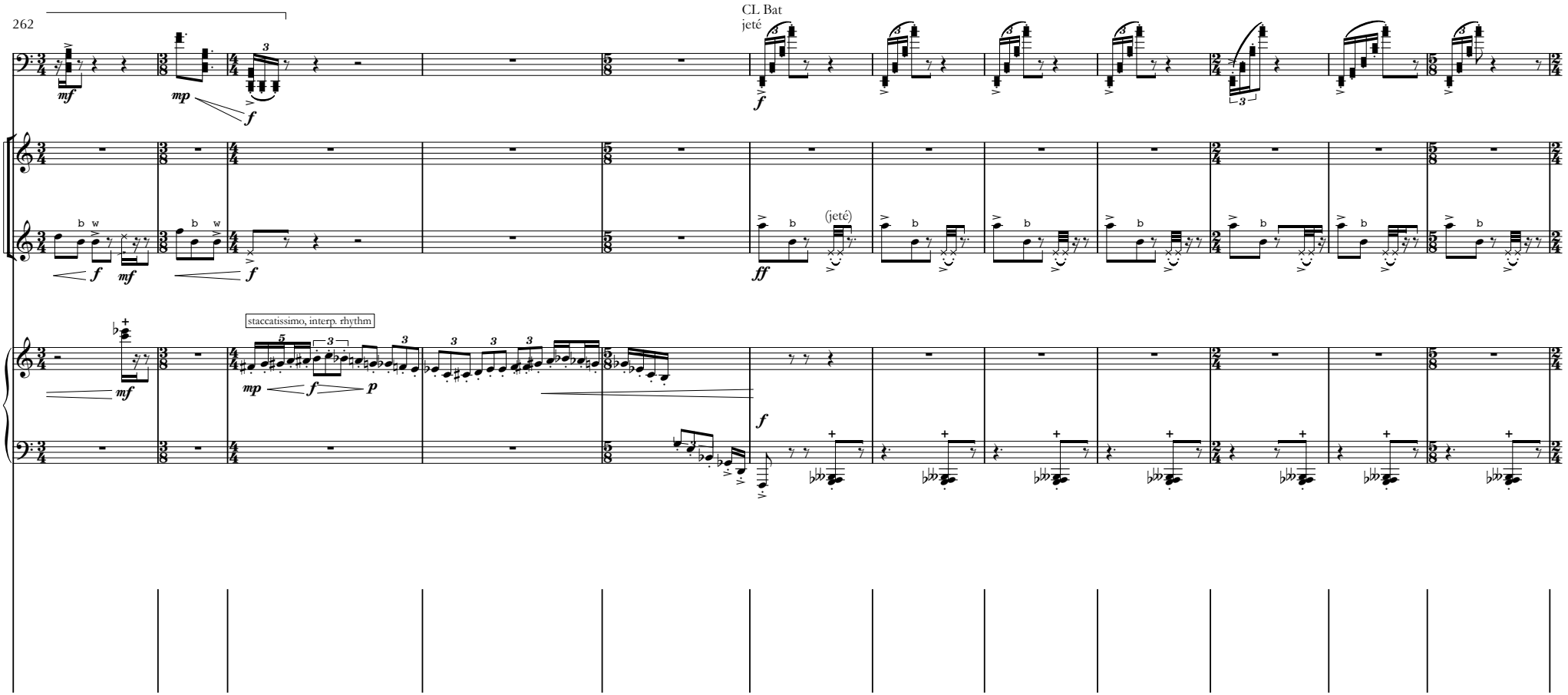

213
Vibraphone
[double time]

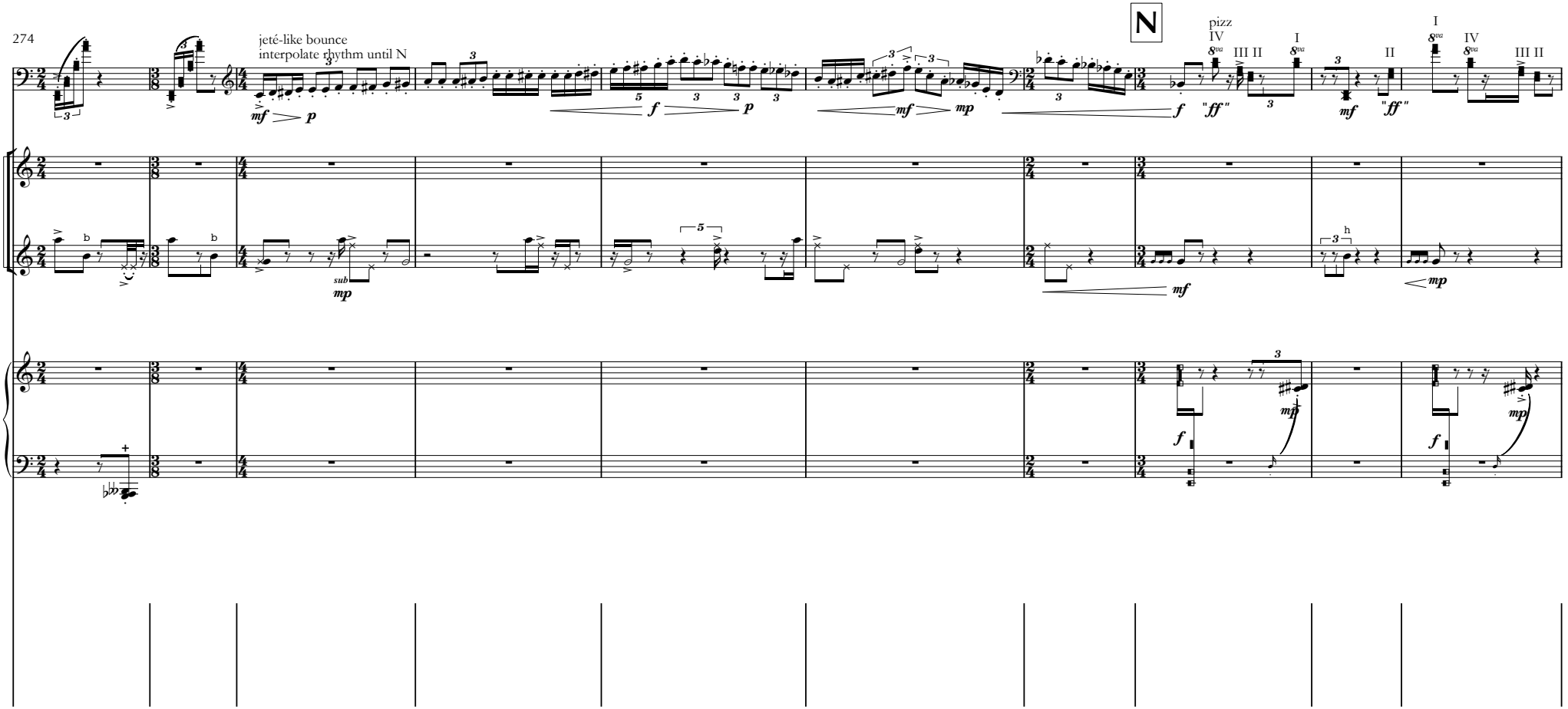

219
arco
CL. Bat.
IV
L
= 112
CL Bat
II
CL Bat
II
CL Bat
II
off the string bounce
IV
pizz
arco

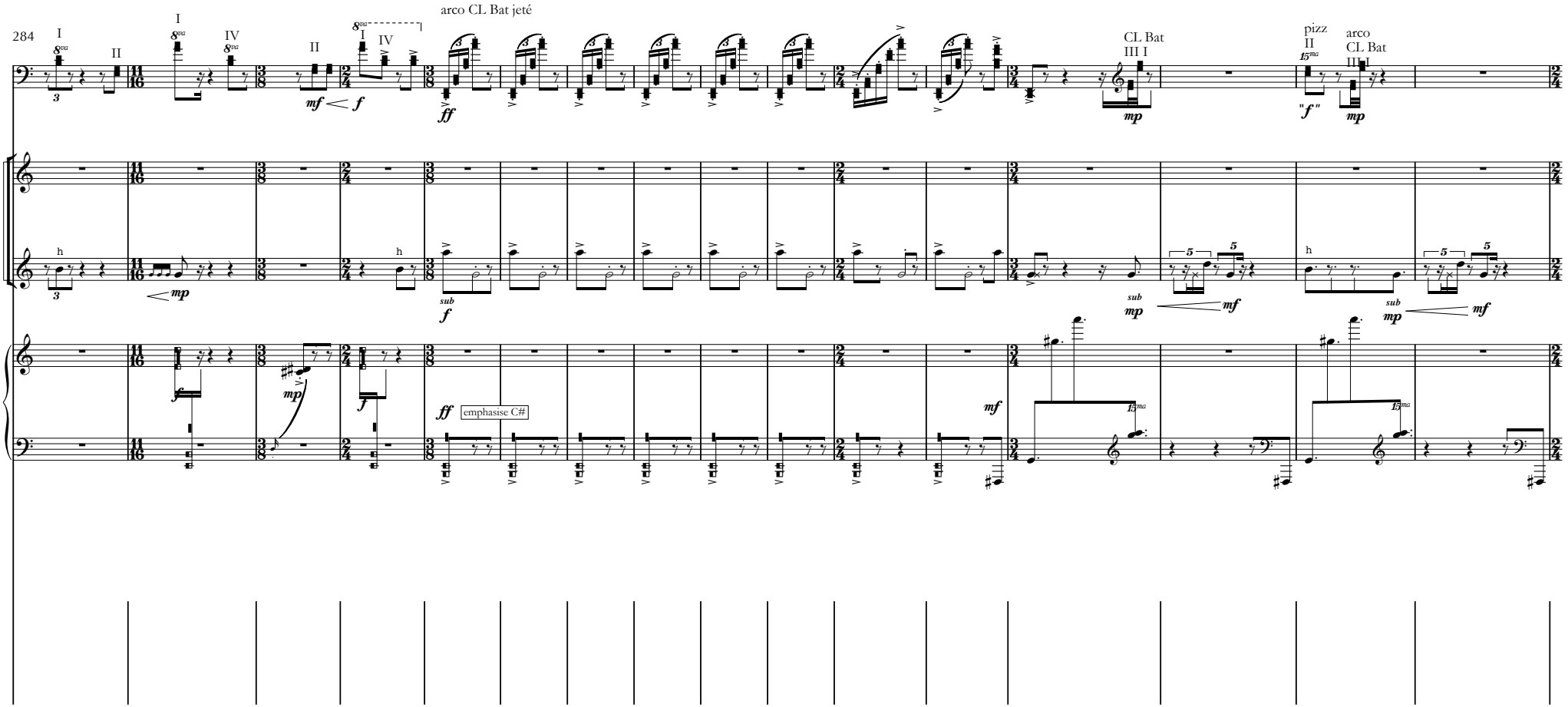

229
IV
pizz
IV
pizz
arco Cl Bat
IV
ST
sim.
interpolate rhythm until m. 241
very
short!
furious

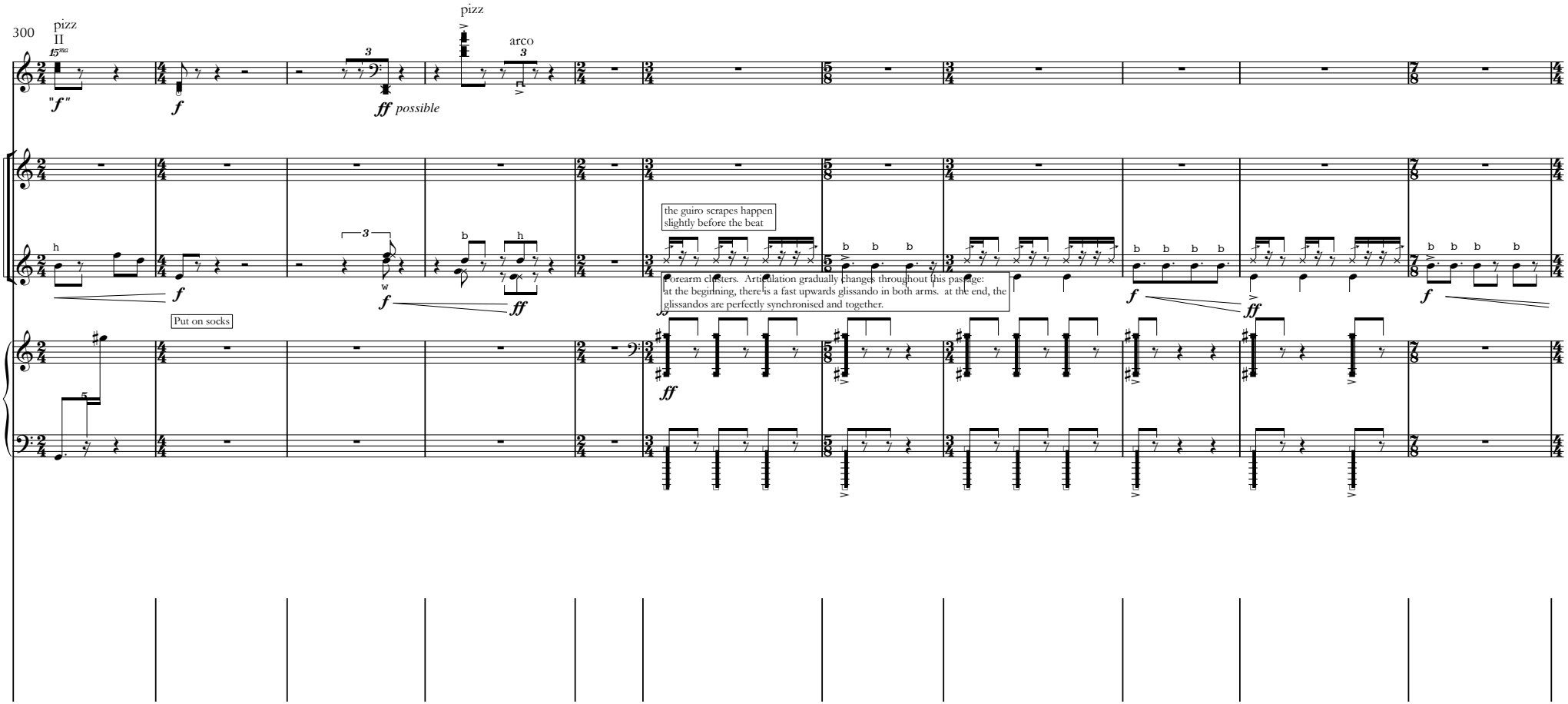

238
on binding
MST
on binding
MST
on binding
pizz
II III II III
II III II III
II III II III
h
sub
sub
sub
8va
8va
8va


M
254
II III IIIII
"f"
arco
II
(don't change bow)
smpz
pizz
I
arco
II
smpz
pizz
I
arco
ST
CL Bat
MST
ST
CL. Bat.
MST
(jeté)
interp. rhythm
interp. rhythm
interp. rhythm

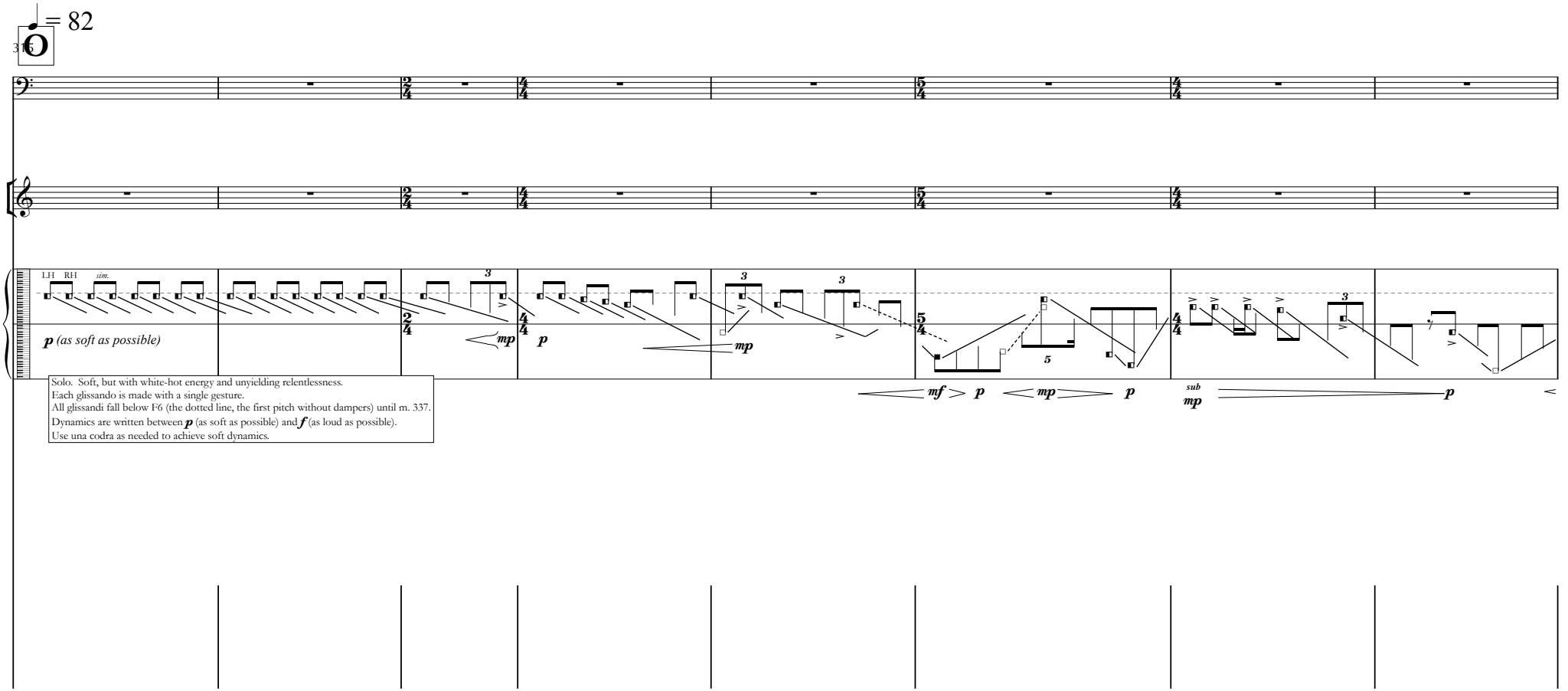

262
CL Bat
jeté
staccatissimo, interp. rhythm
(jeté)


274
jeté-like bounce
interpolate rhythm until N
N
pizz
IV
III II
I
II
IV
III II
sub
mp
mf
f
p
mp
"ff"
"ff"

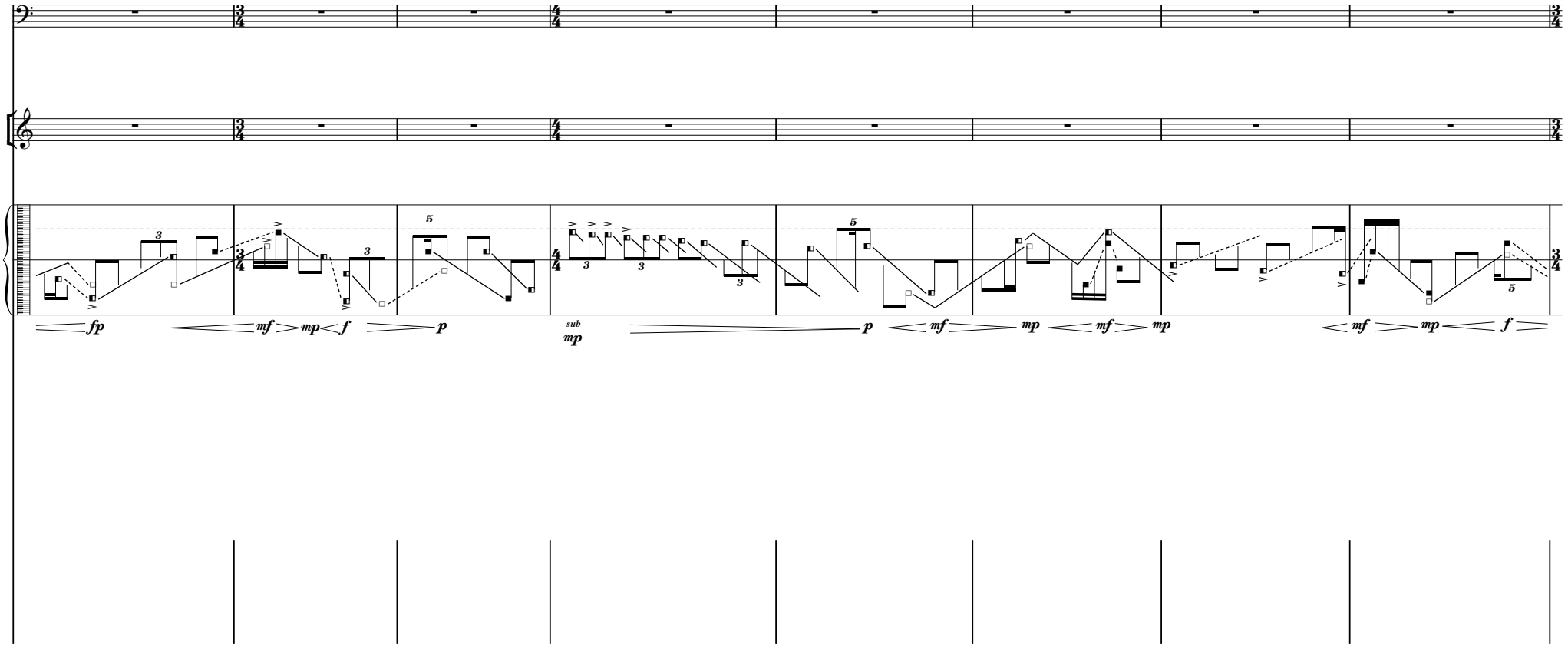

284
arco CL Bat jeté
CL Bat
III I
pizz
II
arco
CL Bat
III I
emphasise C#


300
pizz
II
15ma
"f"
f
ff possible
pizz
arco
the guiro scrapes happen slightly before the beat
forearm clusters. Articulation gradually changes throughout this passage: at the beginning, there is a fast upwards glissando in both arms. at the end, the glissandos are perfectly synchronised and together.
Put on socks

311

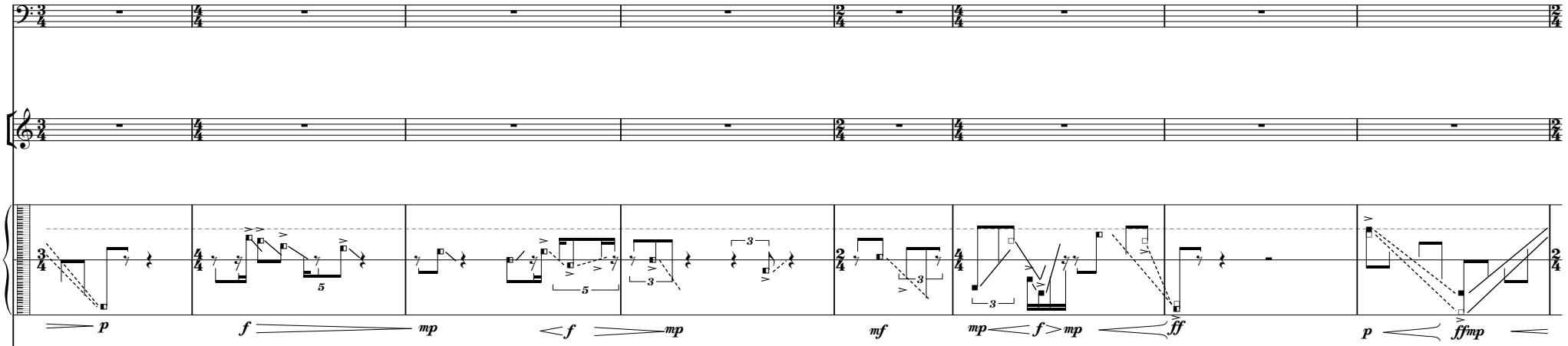

= 82
LH RH sim.
p (as soft as possible)
mp
p
mp
mf
p
mp
p
sub
mp
p
Solo. Soft, but with white-hot energy and unyielding relentlessness.
Each glissando is made with a single gesture.
All glissandi fall below F6 (the dotted line, the first pitch without dampers) until m. 337.
Dynamics are written between p (as soft as possible) and f (as loud as possible).
Use una codra as needed to achieve soft dynamics.

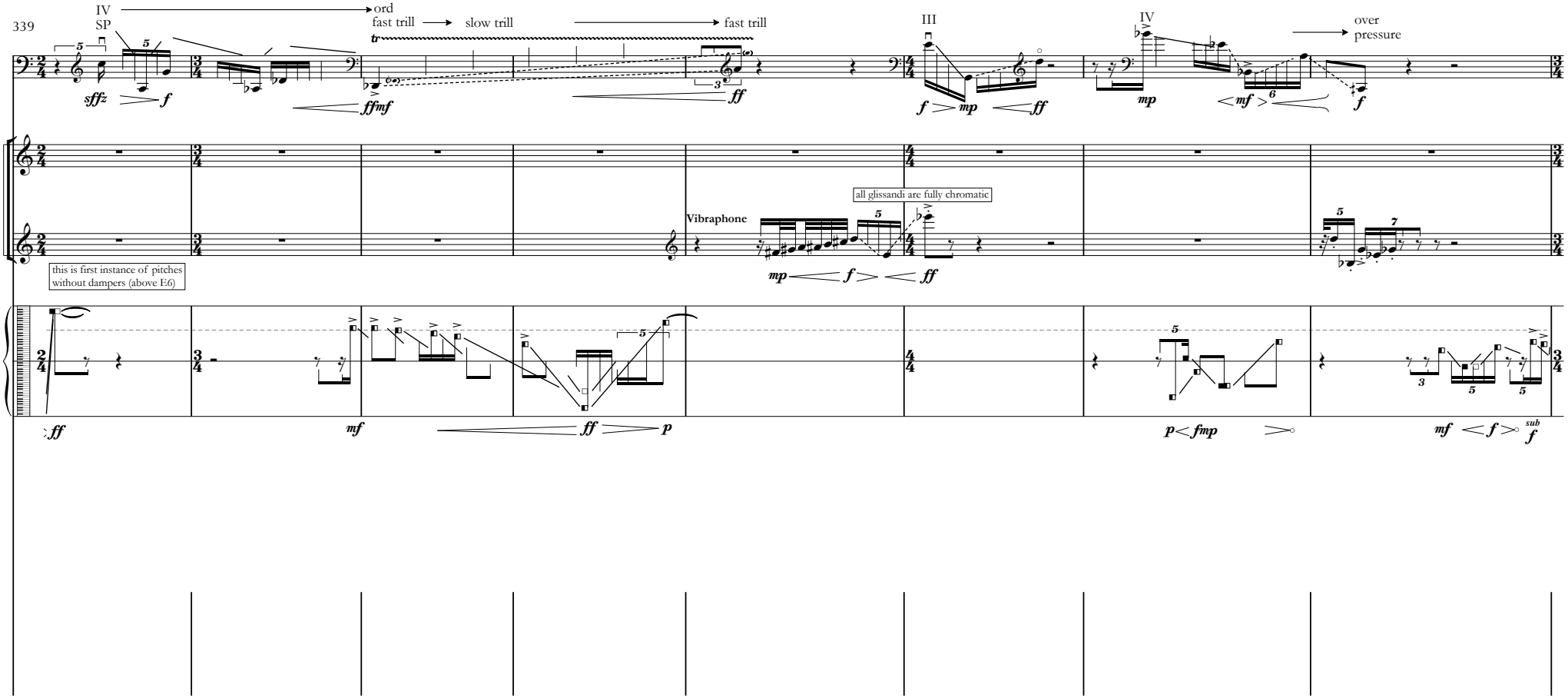
323

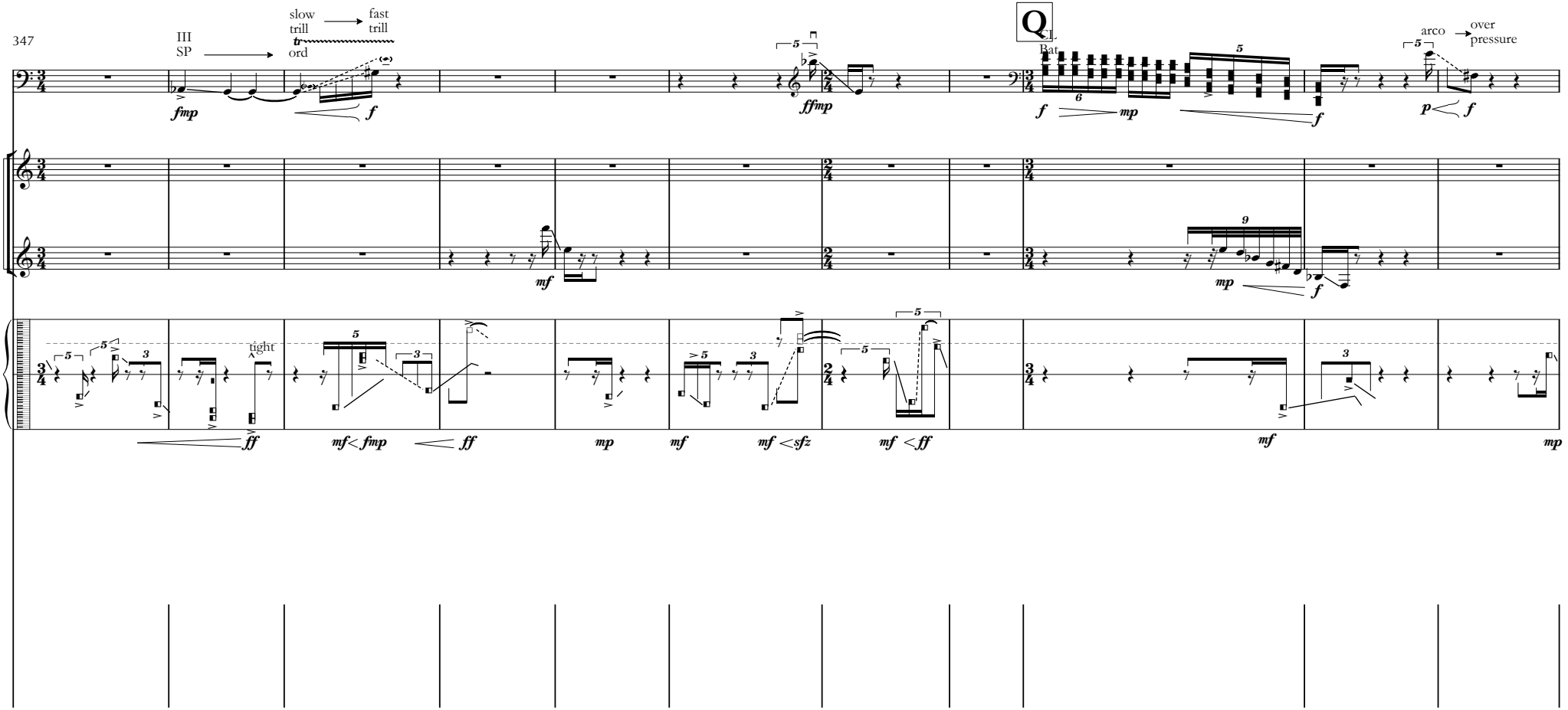


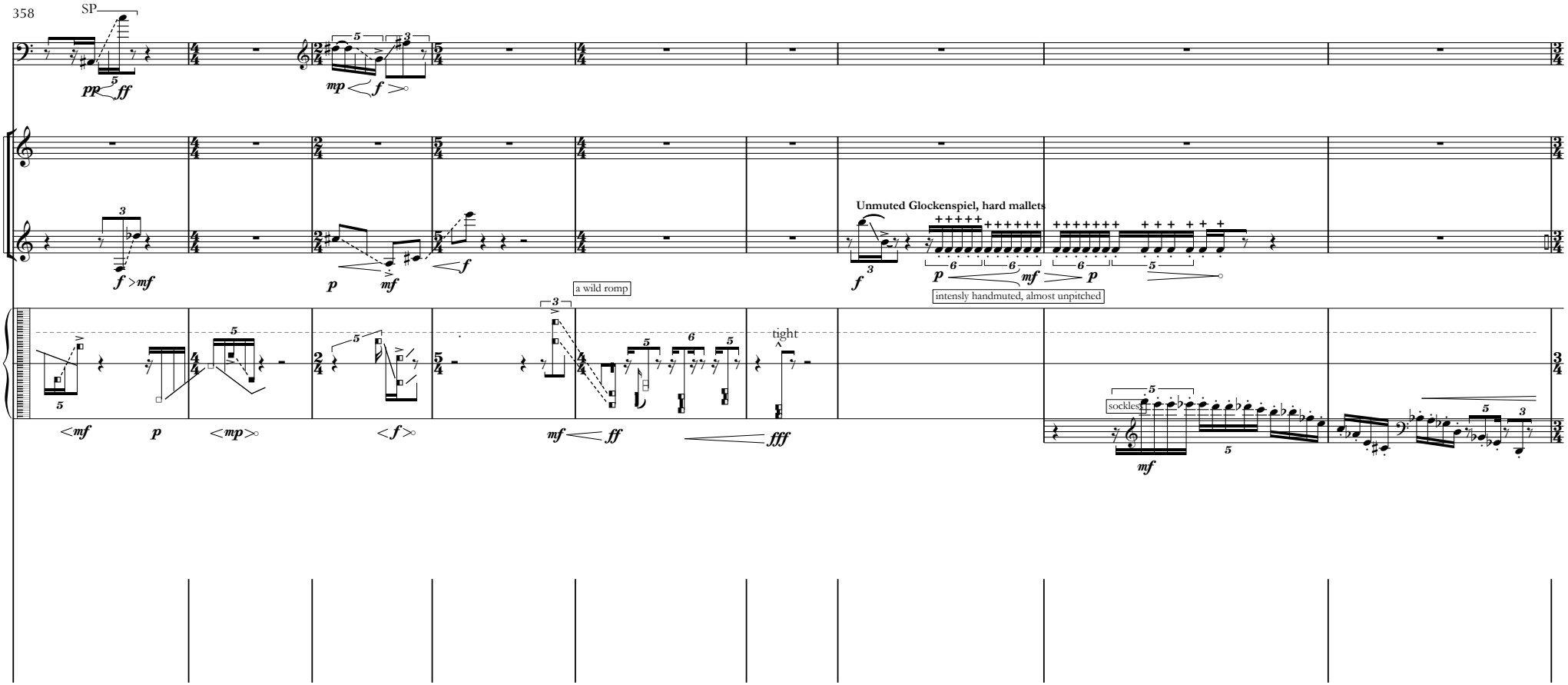
331

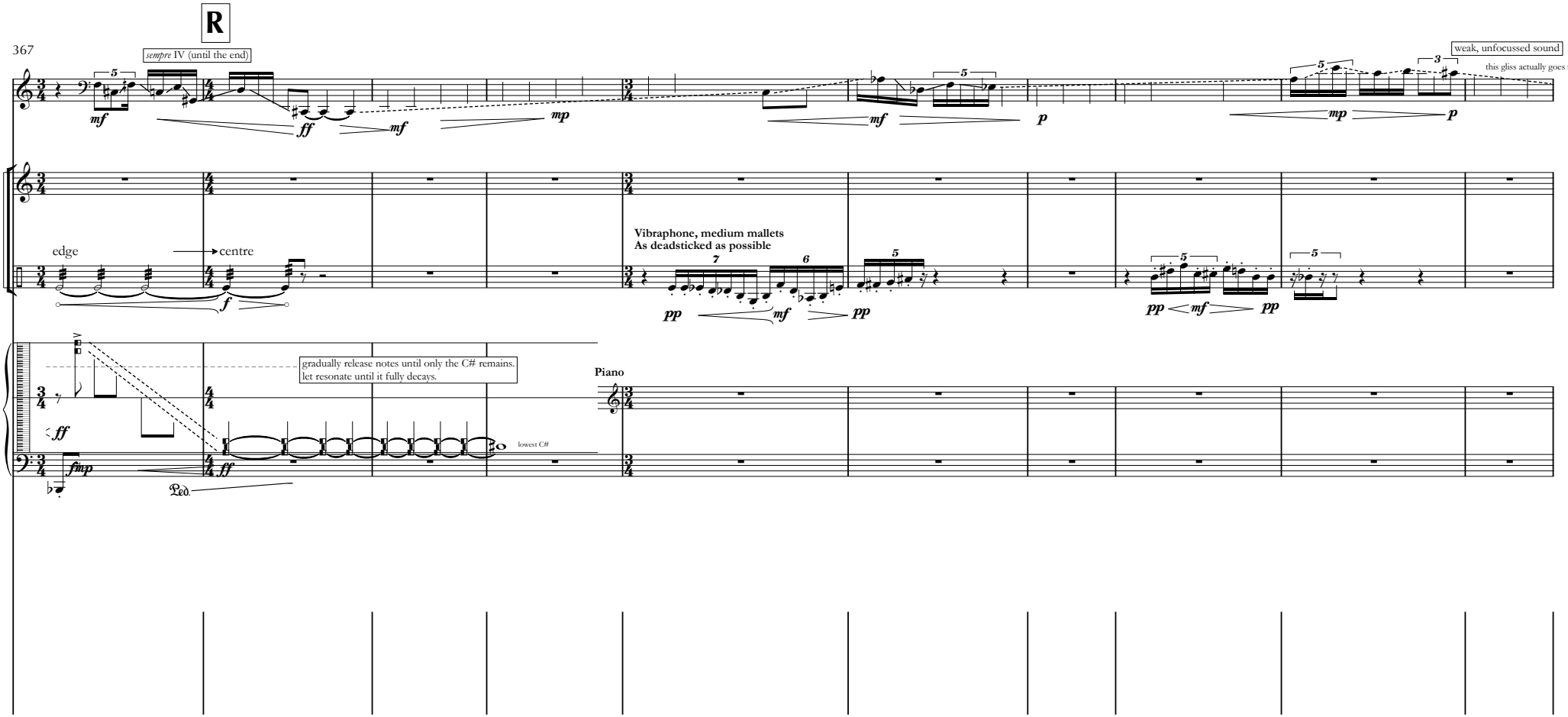
P Play even, fluid, continuos glissandi. Minimise the impact of bow changes and avoid changing the bow if the glissando direction changes when possible. Do dynamics with bow pressure/speed.

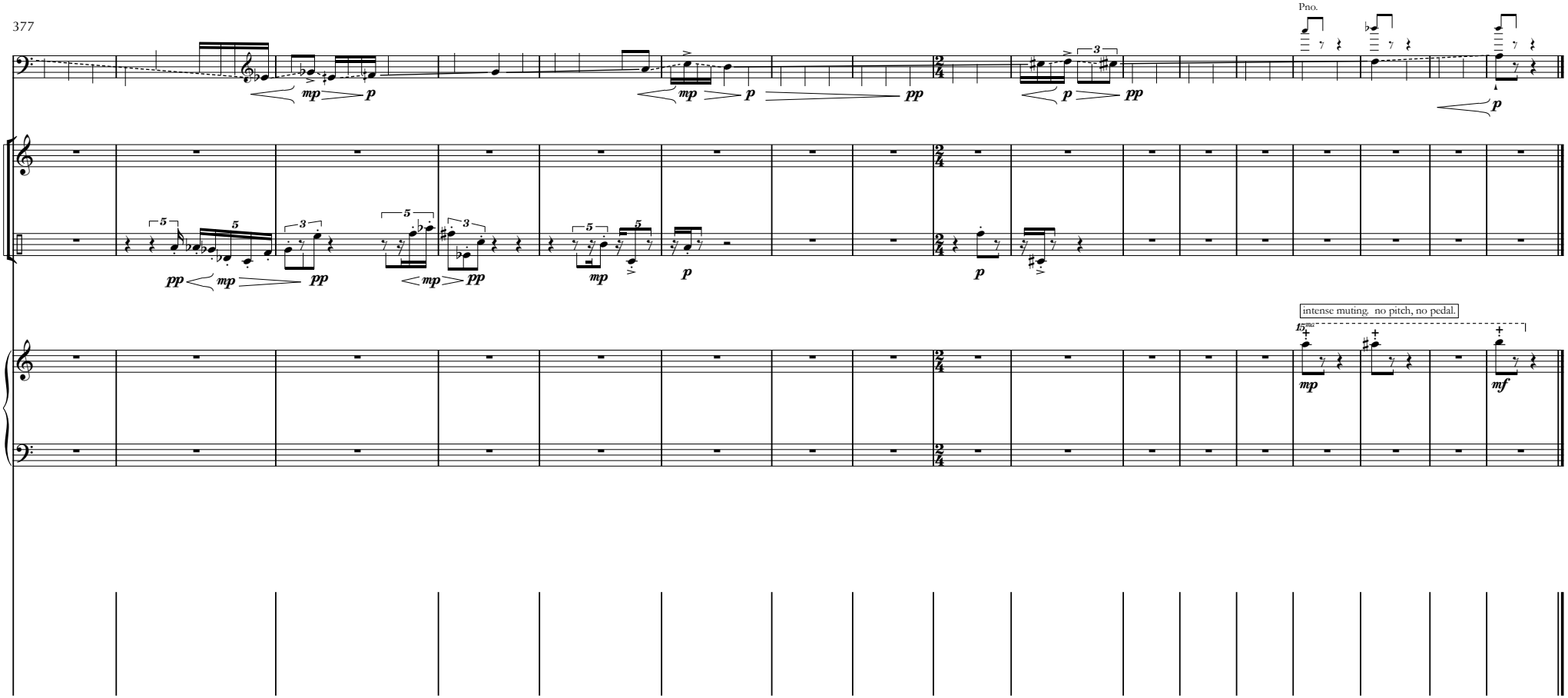



339
IV
SP
ord
fast trill
slow trill
fast trill
III
IV
over
pressure
sffz
f
ffmf
ff
f
mp
ff
mp
mf
f
all glissandi are fully chromatic
Vibraphone
mp
f
ff
this is first instance of pitches without dampers (above E6)
ff
mf
ff
p
p
fmp
mf
f
sub
f


347
III
SP
ord
slow
trill
fast
trill
tr
fmp
f
ffmp
Q
CL
Bar
f
mp
f
arco
over
pressure
p
f
mf
mp
f
tight
ff
mf < fmp
ff
mp
mf
mf < sfz
mf < ff
mf
mp


358
SP
pp
ff
mp
f
f
mf
p
mf
f
Unmuted Glockenspiel, hard mallets
p
mf
p
intensly handmuted, almost unpitched
a wild romp
tight
<mf
p
<mp>
<f>
mf
ff
fff
sockless
mf


R
367
sempre IV (until the end)
mf
ff
mf
mp
mf
p
weak, unfocussed sound
this gliss actually goes up!
mp
p
edge
centre
f
Vibraphone, medium mallets
As deadsticked as possible
pp
mf
pp
pp
mf
pp
gradually release notes until only the C# remains.
let resonate until it fully decays.
ff
fmp
ff
lowest C#
Ped.
Piano


377
Pno.
intense muting. no pitch, no pedal.